

# Request for Proposals (RFP)

Design, Build, Operate & Maintenance Compressed Natural Gas (CNG) Fueling Station 3030 S. 63<sup>rd</sup> Street, Philadelphia, PA 19153 December 21, 2018

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# **Project Description/Cost Proposal**

#### A. PROJECT DESCRIPTION AND BACKGROUND INFORMATION:

On behalf of the City of Philadelphia ("City"), the Philadelphia Redevelopment Authority ("PRA") is requesting proposals for the design, construction, operation, and maintenance of a Compressed Natural Gas (CNG) fueling station at the Facility located at 3030 South 63<sup>rd</sup> Street, Philadelphia, PA 19153. The CNG fueling station (Station) will be owned by The City of Philadelphia. The Station will be completely operated and maintained by the successful Applicant ("Contractor") under an initial ten (10) year Operation and Maintenance (O&M) contract with the City, with successive five (5) year terms unless terminated by either party.

The CNG fueling station will be designed, engineered, permitted, built, commissioned, operated and maintained by the Contractor whose proposal meets all the requirements of the request, and is most competitive. This procurement will not be evaluated solely on pricing.

#### B. GENERAL REQUIREMENTS:

As a minimum requirement, the Contractor must have designed, built, and provided O&M services to at least five (5) 450 standard cubic feet per minute (SCFM) or greater CNG stations within the last two (2) years. Also, the Contractor must have current O&M contracts for at least five (5) comparable-sized CNG stations. Comparable stations are those that are similar in size and throughput with O&M services.

The Contractor's responsibilities under these specifications consist of the following general categories:

- The design, construction, and commissioning of a new state-of-the-art CNG fueling station including fully integrated fuel compression and time-fill dispensing system.
- Perform all related engineering design functions including Civil, Mechanical, Electrical and Instrumentation.
- Permitting, site work including equipment foundations, safety systems, lighting system, fuel
  management system, startup and commissioning, and all other activities and tasks necessary for
  a fully functional 24/7 self-serve CNG fueling facility.
- The Contractor will be responsible for coordinating bringing in utilities gas, electric and phone/internet within 20' of the compressor compound. All costs associated with bringing utilities in for the Station will be the City's responsibility as a pass through.
- Provide a ten (10) year O&M services contract (renewable thereafter) with Contractor's personnel
  for all operating services, preventative, emergency maintenance and repairs to begin immediately
  following commissioning of the Station. This includes all daily, weekly, monthly, annual, and any
  other necessary recurring preventative or emergency maintenance to ensure that the Station is
  functioning properly with no City of Philadelphia involvement.

#### C. DESIGN INFORMATION AND TECHNICAL REQUIREMENTS:

The following information is provided for consideration in the design, construction, and O&M of the Station:



Project Description: A private time-fill CNG fueling station located on the property specified.

All equipment must be new. See Attachment "E" for Conceptual Station

Layout.

Owner: The City of Philadelphia will own the CNG fueling station and equipment.

O&M: All O&M services are to be included in the contract awarded under these

specifications for ongoing Station operations and all preventative and emergency maintenance, labor, parts and materials for the entire CNG fueling station. Detailed description of all O&M services included is

outline below.

Access: Only fleets operated by The City of Philadelphia shall be granted access

to the time-fill CNG station. No public access shall be granted.

Compression: Minimum compression capacity of two (2) 150hp compressors with a

minimum of 450 SCFM total. Compressors must be belt driven with non-lubricant cylinders. Compressors must have inline recovery tank and air

cooled heat exchangers.

Dispensing: Station will include forty-three (43) plumbed time-fill posts. Thirty (30)

complete assembly time-fill post included in initial buildout. Fast-fill

isolation valve and fueling point must be included.

Block Heaters: Station will include block heaters for all forty-three (43) time-fill parking

spots.

Storage: Minimum of one (1) ASME CNG storage vessels with a capacity of 11,537

SCF at 4,500 PSI.

Natural Gas Dryer: One (1) single tower automatic regenerative natural gas dryer to handle

the gas supply and remove sufficient moisture content to meet SAE J1616

specifications.

Genset Transfer Switch: Station will include an Automatic Genset Transfer Switch and Lug Box to

be able to plug in a portable backup generator designed to power one of

the compressors if the Station ever loses power.

Natural Gas Source: The local gas utility PGW reports 10 PSIG as the minimum suction

pressure.

CNG Fuel Usage: The City of Philadelphia usage will follow a plan to replace at a minimum

of twenty-five (25) existing refuse trucks with CNG refuse trucks throughout the term of the Agreement. In year one (1) of the O&M Agreement, The City of Philadelphia anticipates having eleven (11) CNG refuse trucks, year two an additional fourteen (14) CNG refuse trucks. Additional trucks will be added, quantity to be determined at a later date. Each refuse truck is anticipated to consume approximately 15 Gasoline

Gallon Equivalents (GGE) each per day, five (5) days a week with an annual consumption of approximately 4,000 GGE's per refuse truck.

#### D. SCOPE OF REQUIRED SERVICES:

The work to be performed under this Specification shall include, but is not limited to, the following: Perform all necessary engineering design of an integrated CNG Station in accordance with the requirements stated in this Specification.

- Specify and procure all equipment, systems, devices, materials and parts, etc. for the Station.
- Furnish all necessary labor and materials for the complete installation of the integrated Station including all related site work inside the project site boundary.
- Provide labor and equipment for all necessary testing and startup operation of the Station.
- Provide instructions and training services on the design and operation of the Station for City of Philadelphia staff as required.
- Prevailing Wage for station design, engineering, permitting and construction must be included.
- Provide three (3) copies of operation and maintenance manuals of the Station.
- Coordinate all necessary utilities including electric, gas, and telephone/internet.
- Apply for and obtain all necessary permits and licenses for the installation and operation of the integrated Station.

Variations, additions, and deletions to this list are subject to The City of Philadelphia approval.

#### E. DRAWINGS AND CONSTRUCTION SPECIFICATIONS:

The Contractor shall submit construction design drawings, calculations, and other appropriate design documents for The City of Philadelphia review and approval prior to the start of construction. Drawings and documents shall be updated to reflect the final as-built installation and the Contractor shall submit 3 copies to the City of Philadelphia as a condition of final acceptance of the Station. The Contractor shall submit final as-built drawings in hard copies as well as in electronic files.

#### F. LUMP SUM DESIGN & CONSTRUCTION BID AND SCHEDULE:

•	Lump Sum Design & Construction Bid (Integrated CNG Station):		
	\$		
•	Design Schedule:		
	Design, engineering and permitting is estimated to start in 2019 and construction completed in 2019.		

#### G. OPERATIONS AND MAINTENANCE SERVICES:

• General – The Contractor shall provide CNG fueling station O&M including all labor, consumables, preventative and emergency maintenance repairs. Preventative maintenance shall include weekly, monthly, quarterly, and other annual service as required and recommended by the manufacturers of the CNG station equipment for the entire CNG facilities covered in this project for an initial period of ten (10) years from the date of acceptance by The City of Philadelphia. Thereafter, the term shall automatically extend for a period of successive five (5) year terms unless terminated by either party. Maintenance shall also include handling and on-site storage of all waste generated during maintenance activities in full compliance with all federal, state, and local laws.

The O&M services include labor, parts, materials, replacement equipment, permits, inspections, testing, and all monitoring of Station operating systems. The Contractor shall have the capability to remotely monitor the key compressor system variables and dispensing status. An electronic copy of all O&M records shall be provided to The City of Philadelphia on a quarterly basis no later than 30 days following the end of each quarter.

Compressor manufacturer scheduled overhauls/rebuilds are not be included in the Contractors base O&M scope of work and price. Such work will be completed by Contractor, at manufacturer recommended intervals as needed, but will be separately billed to City based on time and material rates provided. Contractor will provide a list of compressor manufacturer scheduled overhauls/rebuilds, not included in the base O&M scope of work and pricing, and budgetary price associated with that work. In addition, Contractor shall not be responsible for Catastrophic Failures not caused by poor maintenance or contractor's negligence.

- <u>O&M Activities</u> O&M is the day-to-day monitoring of the Station systems including flow, temperature, pressure, vibrations, leaks, false alarms, etc.
  - Scheduled maintenance is the specific maintenance performed in conformance with manufacturer's recommendations that may be over a specific period or frequency. Unscheduled maintenance is emergency or unplanned service resulting from a system shutdown or failure causing the Station or at least one of the compressors to not be fully operational. The Contractor shall locally store and maintain an adequate supply of critical spare parts, based on vendor recommendations, for use in emergency situations. Contractor shall provide where their local parts warehouse is located.
- <u>O&M Labor</u> The Contractor will provide locally-based, company employed (not third party contractors) OEM compressor(s) certified and trained, service technician(s) for all maintenance services that have demonstrated experience and competency in maintaining other similar CNG station equipment. The Contractor's service technicians are to be available 24 hours per day, 7 days per week for the duration of the O&M contract. The Contractor must have at a minimum two (2) locally based service technicians that reside no more than two (2) hours from the Station. The Contractor shall use commercially reasonable efforts to be on site within a two (2) hour period if either the Station or compressor(s) are shut down and not capable of fueling. The Contractor will incur all costs associated with meeting all applicable regulations, codes and standards, including costs associated with securing and meeting the terms of all necessary permits. The Contractor shall provide all standard and specialty tools to efficiently maintain and service the equipment.

- Compressor Compound and Fuel Dispensing Area The compressor(s) and related controls shall
  be free from defects or wear, in good working order free of detectable leaks. The fueling panels,
  hoses, nozzles, and related fueling components shall be free from defects or wear, in good
  working order and free of detectable leaks. All leaks shall be immediately repaired.
- Record Keeping The Contractor shall maintain all records and reports electronically during the entire O&M contract period.

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H.	OPERATIONS AND MAINTENANCE	FEE3.

•	Fixed Monthly O&M Fee: \$	
	Time & Material (T&M) Rates for emergency or unscheduled repairs:	
•	Mon – Fri 8:00am – 5:00pm (Regular Hours): \$	per Hour
•	Mon – Fri 5:00pm – 8:00am (Overtime) and All Day Sat & Sun: \$	per Hour
	Compressor Manufacturer Scheduled Overhauls/Rebuilds Budgetary Price:	
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#### I. CONTRACTOR'S RESPONSIBILITY AND GUARANTEE:

The Contractor shall assume full responsibility for proper functioning of the integrated Station and guarantee that the Station meets the performance requirements as described in this Specification.

The Contractor shall guarantee that the equipment, materials and workmanship furnished under this contract will be as specified and free from defects for a period of at least **five (5)** years from the date of acceptance of the work.

If the Contractor neglects to make, or undertake with due diligence to make, the necessary repairs or adjustments within **thirty (30) days** after the City give the Contractor notice of defect, failure, or abnormality of the work, the City is hereby authorized to make the repairs or adjustment itself or order the work to be done by a third party. The cost of the work shall be paid by the Contractor or be deducted from the amount due to the Contractor.

# **Application Process**

#### **Submission Deadline**

Applicants must submit proposals no later than January 31, 2019 at 3:00 PM; absolutely no proposals will be accepted after that time.



#### **Mandatory Pre-Bid Meeting**

All applicants must attend the mandatory pre-bid meeting at 3030 S. 63<sup>rd</sup> Street, Philadelphia, PA 19153 at 1:00 P.M. on January 10, 2019.

The names and contact information for all attendees at the pre-bid meeting will be posted on PRA's website as public information within a few days of the pre-bid meeting.

#### **Questions/Requests for Additional Information**

PRA will accept questions and requests for additional information directed in writing to RFP@pra.phila.gov up to 3 PM on January 14, 2019. Questions, responses, and additional information will be posted on the PRA Website within 3 business days of this date

#### **Related Parties**

Applicants (i.e. individuals, organizations, and businesses) may submit only one response to this RFP. Individuals or businesses that are legally related to each other or to a common entity may not submit separate proposals. The PRA and City, in their sole and absolute discretion, retains the right to reject any proposal where:

- 1. Applicants or principals of applicants are substantially similar or substantially related parties; or;
- 2. The PRA and City has determined that the applicant has violated these conditions or the spirit of these conditions.

#### **Submission Process**

Responses will only be accepted in either of the following:

- Online Submission via the electronic portal on PRA's website (http://www.philadelphiaredevelopmentauthority.org/); or
- 2. Hard Copy Submission Submit 3 original copies of the Response and one electronic copy on a USB Flash Drive to the PRA via hand delivery or registered mail. Files on the USB Flash Drive may only be in Microsoft Word or Adobe PDF. Applicants may hand deliver or send their Response via registered mail to:

Robert LaBrum
Director, Design & Construction
Philadelphia Redevelopment Authority
1234 Market Street, 16th Floor
Philadelphia, PA 19107

#### **Disqualification**

Bids will be disqualified if:

1. They are submitted after the specified deadline;



- 2. They are submitted by some means other than the two formats listed above. For electronic submissions, the PRA website portal is the only means that will be accepted. Submissions sent via email, Dropbox or other electronic venues will be disqualified;
- 3. If the bid package is incomplete.

#### **Schedule**

The timeline for this opportunity is as follows:

Event	Date
RFP posted	December 21, 2018
Mandatory Pre-Bid Meeting	January 10, 2019; 1:00 PM
Questions and requests for additional	January 14, 2019; 3:00 PM
information due	January 14, 2015, 3.00 FW
Responses due	January 31, 2019; 3:00 PM
Respondent selected (Estimate)	February 2019

PRA reserves the right, in its sole discretion, to alter this schedule as it deems necessary or appropriate.

# **Proposal Submission Requirements**

Responses to this Request for Proposals must contain the information described below and conform to the following format:

#### A. Executive Summary

A written narrative of the proposed project should be provided in the form of a cover letter addressed to Robert LaBrum, Director Design and Construction. The narrative should be no longer than two (2) pages in length and should succinctly summarize and describe the proposed project. At a minimum, it should seek to address all of the evaluation criteria. Please note any contingencies to the submitted bid price.

#### B. Financial Summary

Responses must demonstrate financial wherewithal and the capacity to carry out proposed project. Submissions must provide documentation of available funds in an amount no less than the amount valued at the cost of the entire project. Failure to provide clear evidence of committed sources of funds for the proposal to design, fabricate and install and retro-fit necessary equipment for the project will disqualify submissions.

- 1. Evidence of financial capability to fund the total cost of the project. Acceptable forms of evidence include:
  - audited financial statement for last fiscal year plus internal financial statements ending the most recent quarter;
  - signed commitment letter(s) that reference funding this project as proposed, or



- other written evidence of financial support from one or more lending institutions specifying amount to be committed;
- These elements will be reviewed and summarized as the financial components of the proposed development program.
- 2. Litigation/Judgments The proposal must contain information regarding any litigation (pending or threatened) in which the Contractor entity or any members of the Contractor's team are involved and any judgments that have been rendered against the Contractor entity or any member of the Contractor team that may affect the ability to successfully execute the proposed project.

#### C. Contractor Team Qualification

#### 1. Statement of Qualifications; Relevant Experience

Provide a statement of qualifications and capability to perform the services sought by this RFP, including a description of relevant experience with projects that are similar in nature, size and scope to that which is the subject of this RFP. If any minimum qualifications for performance are stated in this RFP, Contractor must include a statement confirming that Contractor meets such minimum requirements.

#### 2. Project Team Organization and Team Resumes

The Contractor shall identify any joint venture partners or their associates by listing the firm, address and telephone/fax numbers and contact person. If a joint venture or association between firms is proposed, describe the contractual relationship.

The proposal shall include a description of the proposed team in both narrative and chart form. The proposal should clearly indicate the relationship, roles and responsibilities of each organization and individual team member. Key positions/individuals should be specifically identified by name and title, with narrative describing their respective areas of expertise, responsibility and reporting.

For each key team member, describe prior experience as it relates to the technical requirements of this project and the individual's position on the project team. Describe all relevant professional experience, academic degrees earned, professional licenses and awards, any special skills and supplementary training relevant to the requirements of this project.

Any proposed project staff that are not full-time employees of one of the corporate team members shall be clearly identified. Briefly describe their employment arrangement and availability for this project.

The Contractor team should demonstrate experience working together by listing all projects in which they have participated.

#### 3. Status of Current Projects

List all incomplete contracts held by your organization at present. Indicate the contracting entity, contract number, location of the work, % complete, and amount for each contract.



#### 4. Safety Record (s)

The Contractor team shall provide records of the entities performance in the safety area of related construction projects, listing any and all citations by OSHA for safety violations. The Contractor shall provide the team's Experience Modification Ratio (EMR) for the past (3) three years consisting of 2015, 2016 and 2017.

#### 5. Environmental Record(s)

The Contractor team shall provide records of the entities performance in the environmental area of related construction projects, listing any and all citations by the EPA, etc. for environmental violations.

#### D. Economic Opportunity Policy & Project Goals

The Contractor team should demonstrate their experience working with MBE&WBE firms in addition to completing the "City of Philadelphia Economic Opportunity Plan" form (Attachment A).

#### E. Campaign Disclosure Forms

Each member of the development team must complete the Campaign Disclosure Forms in Attachment B.

#### F. Conflict of Interest Form

All proposals submitted in response to this RFP must contain a fully executed Conflict of Interest form. A copy of this form is attached as Attachment C.

# **Evaluation & Selection**

PRA intends to award this contract to the respondent that best demonstrates the level of experience, skill and competence required to perform the services called for in this RFP in the most efficient, cost-effective, and professional manner. The PRA will initially review the proposals to determine compliance with the Proposal Submission Requirements. Only proposals that comply with these requirements will be considered for evaluation. If no proposal meets these requirements, the PRA may allow all respondents to supplement their submissions to conform to these requirements.

PRA will evaluate Contractors based on the following factors:

- 1. Complete application and eligibility of Contractor including compliance with all requirements listed in this RFP;
- Appropriateness of firm for the scope of work, and ability to carry out the work in a high-quality standard on time and budget;
- 3. Prior experience, including competence and proven track record working with City of Philadelphia and/or other public agencies;
- 4. Track record of economic inclusion in contracting and workforce;
- 5. Bid price;
- 6. Any other factors the PRA considers relevant to the evaluation of the responses; and
- 7. Financial capability



# **Events of Disqualification or Default**

Subsequent to the selection of a firm, and before execution of an Agreement, the PRA may treat any of the following as an event of disqualification or default:

- 1. Unilateral withdrawal by the selected respondent;
- 2. Failure to proceed substantially in accordance with the proposal as submitted;
- 3. Failure by the Respondent for any reason whatsoever to timely execute the Agreement when tendered;
- 4. Material misrepresentation, omission, or inaccuracy contained in any document submitted either as part of the Request for Proposals, or subsequent thereto. For the purposes of this section, the PRA places particular importance on the information required by the Respondent's Statement of Qualifications and Financial Responsibility and the Respondent's Statement for Public Disclosure;
- 5. Failure to provide in a timely manner the additional material required after selection throughout the PRA disposition process.

Upon the happening of an event of disqualification or default by the Respondent, PRA shall have the right, at its election, to:

- 1. Rescind its selection; or
- 2. Declare null and void an Agreement that may already have been executed.

# **Declarations and Other Information**

**Economic Inclusion**: The PRA strongly encourages and promotes the employment of qualified MWDBE firms in all aspects of its procurement of goods and services. If applicant is a Certified MWDBE; please submit information to confirm Certification as part of bid proposal.

**Tax Clearance and Conflict of Interest Form**: Respondents, upon request of the PRA, must provide evidence satisfactory to the PRA that all municipal taxes, including business taxes, real estate, school, water and sewer charges, if applicable, are current for both the individual applicant and the applicant's firm and neither is currently indebted to the City; will at any time during the term of the agreement be indebted to the City, for or on account of any delinquent taxes, liens, judgments, fees or other debts for which no written agreement or payment plan satisfactory to the City has been established. Please complete the Philadelphia Tax Status Certification and Conflict of Interest form (Attachment C) and submit it with your proposal.

**Campaign Contribution Disclosure Forms:** Please complete the applicable disclosure forms (Attachment B) and submit with your proposal.

**Insurance Requirements**: Please submit a certificate of insurance evidencing the required coverages as outlined in Attachment D with your proposal. If, for any reason, you cannot comply with the insurance requirements, please provide the reasons for your inability to do so and the PRA will consider any deviations from the insurance requirements on a case-by-case basis.

By submitting a proposal in response to this RFP, an Applicant affirmatively acknowledges: (i) its acceptance of the terms and conditions of this RFP; (ii) the PRA may exercise in its sole discretion the following rights; and (iii) the PRA may exercise the following rights at any time and without notice to any Applicant.

- 1. to reject any and all proposals;
- 2. to supplement, amend, substitute, modify or re-issue the RFP with terms and conditions materially different from those set forth here;
- 3. to cancel this RFP with or without issuing another RFP;
- 4. to extend the time period for responding to this RFP;
- 5. to solicit new proposals;
- 6. to conduct personal interviews with any Applicant to assess compliance with the selection criteria;
- 7. to request additional material, clarification, confirmation or modification of any information in any and all proposals;
- 8. to negotiate any aspect of a proposal, including price;
- 9. to terminate negotiations regarding any and all proposals at any time;
- 10. to expressly waive any defect or technicality in any proposal;
- 11. to rescind a selection prior to contract execution if the PRA determines that the proposal does not conform to the specifications of this RFP;
- 12. to rescind a selection prior to contract execution if the PRA determines that the specifications contained in this RFP are not in conformity with law or that the process in selection of a proposal was not in conformity with law or with the legal obligations of the PRA;
- 13. in the event a contract is awarded, the successful Applicant or Applicants shall procure and maintain during the life of the contract liability insurance in an amount to be determined prior to the award of any contract;
- 14. in the event a contract is awarded, all Applicants agree to perform their services as an independent contractor and not as an employee or agent of the PRA;
- 15. in the event a contract is awarded, all Applicants agree that no portion of performance of the contract shall be subcontracted without the prior written approval of the PRA; and
- 16. each Applicant agrees to indemnify, protect and hold harmless the PRA from any and all losses, injuries, expenses, demands and claims against the PRA or the City of Philadelphia sustained or alleged to have been sustained in connection with or resulting from (i) the submission of the Applicant's proposal; (ii) the delivery by the Applicant to the PRA of any other documents or information; and (iii) any other conduct undertaken by the Applicant in furtherance of or in relation to the Applicant's proposal. Each Applicant agrees that its duty to indemnify and hold harmless shall not be limited to the terms of any liability insurance, if any, required under this RFP or subsequent contract.

The Authority is under no obligation whatsoever to Applicant as a result of this RFP. The RFP does not represent any commitment on the part of the Authority to Applicant or the project. In no event shall the Authority be responsible for any cost, expense or fee incurred by or on behalf of Applicant in connection with the RFP. Applicant shall be solely responsible for all such costs, expenses and fees.

NOTICE: The PRA is subject to the Pennsylvania Right to Know Law. Any information provided in your Response to this may be subject to disclosure to the public. Documents provided in response to this RFP may also be required to be disclosed by applicable law, subpoena, and/or court order.

# **CNG Fueling Station RFP**

# PRE-BID ATTENDEES - THURSDAY, JANUARY 10, 2019 (1:00 PM)

<u>Name:</u>	Company:	<b>Phone Number:</b>	Email:
David Ulrich	Clean Energy	708-606-9738	dulrich@cleanenergyfuels.com
Mark Riley	Clean Energy	603-318-6817	mark.riley@cleanenergyfuels.com
Graham Barker	ANGI Energy Systems	203-394-7889	gbarker@angienergy.com
Brian Keelen	Air and Gass Technologies	732-566-7227	bkeelen@airgastech.com
Shaun Anderson	KML Carpenters	484-824-2114	sanderson@kmlcarpenters.org
Joe Brydges	General Asphalt Paving Co.	484-614-6551	jbrydges@johnmeehanandson.com
Tony Bandiero	Eastern Pennsylvania Alliance for Clean Transportation	215-990-8200	tbandiero@ep-act.org
Caroline McCallum	Renewable Connections	610-740-4395	caroline@renewable-connections.com
George Wallace	Empire Supplies and services, LLC	215-516-5788	empiremechanical@outlook.com
Lavena Pleva	Promatech Inc.	856-314-8468	Ipleva@promatechinc.com
Eileen Della Volle	KS Engineers, P.C.	215-925-0425	edellavolle@kseng.com
Julian T. Canuso	Oxford Engineering Co.	856-541-0700	canuso@oxfordengineering.com
Vince Tomasso	Air and Gas Tech	732-566-7227 x109	vtomasso@airgastech.com
Ron Gulmi	Tru Star Energy	516-359-6038	rgulmi@trustarenergy.com
Robert LaBrum	Philadelphia Redevelopment Authority	215-209-8763	robert.labrum@pra.phila.gov
Joe Garbarino	City of Philadelphia, Public Property	215-686-4559	Joseph.garbarino@phila.gov
Chri Cocci	City of Philadelphia, Fleet Management	215-906-4228	christopher.cocci@phila.gov

## QUESTIONS/ANSWERS: CNG FUELING STATION RFP

1. PAGE 3 – COMPRESSOR REQUIREMENT:

The statement "compressors must be belt driven with non-lubricated cylinders" limits the compressor options to one manufacturer – Clean Energy Compression (formerly IMW) - based on this description. In the US, this compressor is marketed exclusively by Clean Energy Fuels, and historically they have not offered this to competing contractors.

Based upon this requirement, it appears that the City of Philadelphia is looking at a sole source bid, as no one else will be able to bid competitively. Please confirm if this is the intent.

#### ANSWER:

The city does not specify any brand of compressor, however, this type of compressor is commercially available from IMW Industries.

2. Also, the IMW compressor is not considered a non-lubricated design within the compressor industry. It utilizes a combination packing design instead of a true distance piece, so it is considered an incidental or accidental lube design, as oil can migrate from the crankcase into the compression cylinders via the piston rod, and into the rest of the fueling system. This is evidenced by the fact that Clean Energy installations using this compressor still install oil coalescing filters at the time fill headers, fast fill dispensers and other areas of the fueling system. If this was a true non-lube design, these filters would not be required.

A copy of a presentation from a 1995 NGV industry conference detailing the different types of compressor lubrication is included for your reference. Another factor to consider is spare parts. Having only one source of spares restricts anyone other than Clean Energy from getting fair prices, which would increase maintenance costs for their competition. In view of the above, we request that the compressor restriction be lifted to allow industry standard, oil lubricated compressors with either belt drive or direct drive be used to provide a true competitive bid. You have referenced SAE J1616 – Recommended Practice for Compressed Natural Gas Vehicle Fuel – for dryer moisture content; but this document also limits the amount of oil carryover allowed from the compressor, and all CNG compressor manufacturers must comply with this requirement, so we recommend it be applied to the compressor too.

#### ANSWER:

The city will consider other options if the compressor will operate on a minimum of 10 PSI inlet pressure with the same horsepower and Cubic Feet per Minute.

Questions Nos. 3-11 are asked with the assumption that the above restrictions, as outlined in Question No. 2, are lifted:

3. **Page 2, Section A:** It is understood CMAQ funds are being applied to this CNG project. Based upon this, are Buy America requirements being applied to the CNG station equipment? If so, please confirm which section will be used.

#### ANSWER:

CMAQ funds are for vehicle purchases only.

#### 4. Page 2, Section B:

This section mentions a Fuel Management System, but it is not referenced in the technical requirements, and time fill systems do not typically utilize fuel management. Please confirm if this is required, and if so provide design details and specifications.

#### ANSWER:

Not required

#### 5. Page 3, Section C:

**Compression:** Based upon 43 vehicles using 15 DGE each, the minimum compression requirements with a 10-hour fill window are approximately 150 SCFM, and with an 8-hour time fill window approximately 190 SCFM. Is your intent to provide 100% redundancy with your 450 SCFM total flow requirement?

#### ANSWER:

Yes, future plans may include additional vehicles beyond what is specified in this RFP. The station must be designed to be expandable without changing the Infrastructure.

6. **Dispensing:** This section indicates 43-time fill posts, but the layout drawing only shows a combined 42 parking spaces. Is the extra post to be used to provide emergency fast fill a vehicle? If so, where is this to be located on the site? Are individual posts required for each parking space, or can dual position posts be used in Time Fill area #1?

#### ANSWER:

Fast fill will be in the isle between K rails. Dual posts are acceptable.

7. **Storage:** It is assumed this storage vessel is to be used for a fast fill post. Does this require an additional valve panel to isolate it from the time fill system to speed up fueling, or is it to be piped series with the time fill headers?

#### ANSWER:

Storage should be available to fast fill port, compressor to engage when storage is depleted. No additional valve panel should be required, however, a manual valve should be installed between the fast fill post and the time fill post at the K rail.

8. **Natural Gas Dryer:** The referenced single tower dryer is not available with automatic regeneration; the regeneration cycle must be manually initiated. If an automatic regenerating dryer is required, it must be the more expensive twin tower design. Please confirm what is required.

#### ANSWER:

Manual is acceptable.

9. **Natural Gas Source:** 10 PSIG **minimum** suction pressure is given; however, it is not clear if this is a regulated or unregulated pressure. It is assumed that this will be a worst case low pressure at peak usage times – primarily meal times in the winter, and probably not overnight when your vehicles are fueling. Can you obtain the pressure charts from PGW showing nominal, maximum and minimum gas pressures and the times they typically occur, as this may allow for lower HP compressors to be utilized, thereby reducing capital and operating costs?

#### ANSWER:

The system must be capable of operating at the lowest possible pressure which Philadelphia Gas Works (PGW) confirmed is 10 PSI. Please see the attached agreement from PGW.

10. **Page 6, Section I:** This section requires a 5 year "guarantee". As the contractor is referenced, it is assumed it relates to maintenance performance, as typical equipment manufacturer's warranties do not last this long. Please confirm.

#### ANSWER:

A 5 year warranty can be listed separately as an additional cost.

11. **Drawing CP-1:** This drawing shows two simplex compressors; would a duplex compressor be considered?

#### ANSWER:

Contractor may propose an alternate design. Alternate proposal must meet or exceed performance and design outlined in this request.

12. Would it be possible to share more information on how the requirement for the 450 scfm was determined? Since the station you are requesting is a time fill station, understanding your fueling window would be helpful in sharing additional information for your consideration.

#### ANSWER:

Vehicles at this location are used for winter snow operations therefore for redundancy purposes site must be capable of refueling multiple vehicles (up to 25) in succession.

13. Page 2 General Requirements, 3<sup>rd</sup> bullet "Fuel management system" what are the expectations for this since tracking a time-fill station is not an industry standard configuration and will be costly (Similar reference in the O & M).

#### ANSWER:

Not required.

14. Page 3 dispenser: "Station will include forty-three (43) plumbed time-fill posts. Thirty (30) complete assembly...in initial buildout..." Please verify what is intended by this initial buildout and how it applies to the "Conceptual Layout" which indicates forty-tow (42) posts (presume 1 post is for fast-fill).

#### ANSWER:

The city intends to purchase 25 trucks within the next two years, initial build requests 30 posts for 25 trucks the 5 extra posts for redundancy. The city expects to add additional trucks every year necessitating expansion of up to, and possibly beyond the 42 posts outlined in this request. The station must be designed to be expandable without changing the Infrastructure.

15. Page 3 Natural Gas Source: 10 PSI is listed as minimum and what is the maximum, so we can design a system for a projected pressure range.

#### ANSWER:

PGW states; "Minimum guaranteed 10 PSI, average 17 PSI, main is rated at 35PSI"

16. Page 5: O & M Activities Section: what is the intent of the City in handling negligence calls? For example, a drive-away that damages a hose, breakaway or nozzle.

#### ANSWER:

The city performs in house repairs, other repairs requiring additional expertise will be performed by the awarded vendor as a time and material repair.

17. Page 6: "free from defects for at least five (5) years..." does this refer to the only compression equipment?

#### ANSWER:

All equipment

18. Page 8 "Retro-fit necessary equipment for the project..." Please define equipment referenced.

#### ANSWER:

Page 8, <u>Proposal Submission Requirements</u> is amended as follows: "Responses must demonstrate financial wherewithal and the capacity to carry out proposed project. Submissions must provide documentation of available funds in an amount no less than the amount valued at the cost of the entire project. Failure to provide clear evidence of committed sources of funds for the project will disqualify submissions".

19. Is this a "Brown-Field" site and/or carries any environmental requirements?

#### ANSWER:

None we are aware of.

20.	Is this site in a flood plain and if so, what are the elevation requirements?  ANSWER:  This is not a flood plain.
21.	Is CNG Fueling an approved use for the site? Are there any zoning or planning department(s) applications required?
	ANSWER: Zoning permits required.
22.	Can you provide a cut sheet or configuration on the trucks intended for this project? This is needed for the design the time-fill post assemblies and respective block heaters.
	ANSWER: Attached
23.	IS this project exempt from permit fees?
	ANSWER: No
24.	How will internet be provided for the project? Independent of the City's system?
	ANSWER:
	Contractors' responsibility.
25.	How are we to handle debris removal? Independent of City?
	ANSWER: Contractors' responsibility.
26.	In the event we have an option for Fuel Management, would there be an opportunity to provide a separate price for this as an addendum to the base bid?
	ANSWER: Yes
27.	What are the actual daily hours of operation for the refuse trucks and the daily hours available for time-fill?
	ANSWER:

Dependent upon operational need. Normal hours 6:00 AM 6:00 PM. Fill available 6:00 PM 6:00

AM.

28. During the pre-bid meeting there was mention of snow plowing as an operating requirement of the refuse trucks. During snow plowing operations, what is the fuel use requirement per truck per shift? How many shifts and is it a 24-hour operation until the snow is cleared?

#### ANSWER:

Assumption each truck will use at least 16 DGE per shift 24 X 7 until event ends.

29. The RFP indicates on page 3, "Dispensing: ....Fast-fill isolation valve and fueling point must be included." Attachment E - Conceptual Station Layout includes a single storage vessel and valve panel but does not include a fast fill dispensing location. Where does the City want the fast-fill dispensing located? Additionally, the RFP mentions under Section B. General Requirements that the contractor is responsible for a fuel management system. During the pre-bid meeting it was mentioned the Fleet Data Systems (FDS) from California (local company Internet Works) was in use by the City. Is this expected for the fast-fill dispensing only? Is a common meter sufficient for the time-fill portion without going through the fuel management system? It was mentioned that the refuse trucks use RFID, will there be a requirement for some type of ring on the fast-fill nozzle? Will there be a requirement for a fuel control terminal at the fast-fill dispenser?

#### ANSWER:

Fast fill will be in the isle between the K rails. Fuel Management system not required.

30. The RFP indicates on page 3, "Block Heaters: Station will include block heaters for all forty-three (43) time-fill parking spots." We are confirming that the CNG trucks will have engine block heaters since most CNG refuse trucks do not have them. Also, are the outlets within the scope of the contractor or the City? If the existing outlets are to remain, then there could be an upgrade of the outlets to explosion proof outlets.

#### ANSWER:

Conduit may be used if it is in good condition, all other posts and devices must be new.

31. I understand there was nothing official, but if the gas line pressure from PGW does float between 10 – 18 PSIG, do you want a compressor capable of accepting this range without using a regulator?

#### **ANSWER:**

Yes

## **QUESTION NO. 22 - ATTACHMENT**

**TYPE:** 6 X 4 CNG TRUCK with 20 cubic yard High Density compaction body

**GVWR:** 56,700 LBS. APPROX.

**SPEC. CODE:** 32831CNG.12

**VOCATION: REFUSE COLLECTION** 

INTENT:

It is the intent of this specification to cover the basic requirements of a well designed conventional cab, fiberglass tilt hood, stationary grill and chassis complete in every detail, employing the best workmanship and material to insure ample sturdiness, flexibility and economy of operation. The cab and chassis must accommodate a 20 cubic yard high density compaction, rear loading compactor complete as described in section 4 with an optional snow plow lift frame, plow and controls. The compactor body shall have a full sweep hydraulic telescopic ejection discharge system and a design payload of more than 1,000 lb. per cubic yard. It shall be the latest production model conforming to the following specifications.

The following paragraphs cover all equipment, attachments and superstructures included in the modification to the standard specification(s).

Appurtenances and/or accessories not herein mentioned but necessary to furnish a complete unit ready for immediate use upon delivery shall be included and conform to the best practices known in strength, quality, material and workmanship and be subject to these specifications in full. All equipment/accessories standard for the model bid, or any option package required to meet any portion of the specification shall be provided. Delete credit option(s) or dealer piecemealing of items normally supplied in an option package shall not occur without the expressed written consent of the City. Should the manufacturer's current published data or specifications exceed these, they shall be considered minimum and be furnished.

All specified items shall be factory / Original Equipment Manufacturer (OEM) installed. Instances where specified items are not available through the manufacturer, the dealer may install "aftermarket". However, these items and installation must be of the best known for the particular industry and approved by the Office of Fleet Management (OFM).

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Awarded vendor must furnish at time of delivery, for each piece of equipment being delivered, a line sheet pertaining to all components of the vehicle. This unit must supply as a minimum all standard equipment of the referenced model(s) in this specification. Awarded vendor is considered the "Prime Vendor" for the complete unit and is responsible for all conditions of the bid.

All wiring shall be color or number coded. Circuit breakers or fuses shall protect all electrical circuits. All chassis-to-body wiring shall be of the **DIN / WEATHERPACK** type connections. All non-OEM wiring connections shall be crimped and soldered and covered with shrink-wrap.

All wiring and non-hydraulic hoses and tubing throughout shall be protected by convoluted plastic loom. Nylon abrasion sleeve covering and HYCON clamps shall protect all hydraulic hoses and tubing as needed. Rubber grommets shall be supplied on all wiring, hoses, and tubing when passing through any bulkheads, body panels, etc.

It should be noted that the specific requirements, as outlined below, supersede and/or modify the corresponding paragraphs in the standard reference purchase description specification. It also should be noted that any deviation of a line item should be addressed in letterform and included in the bid package.

This specification is not meant to be restrictive. It is recognized that manufacturers may have used different methods to insure integrity of their system. Bidders may substitute, for evaluation, alternate systems and the testing programs or protocols they have conducted to demonstrate compliance of their product. ("Or Approved Equal Clause")

#### "OR APPROVED EQUAL"

The mention in the specifications of apparatus, equipment or material by brand name or by such specified description of the same as is hereby made, is intended to convey to the bidder's understanding, the degree of excellence required. Any article, equipment, or material, which will conform to the standards and excellence so established, and is of equal merit, strength, durability and appearance to perform the desired function, and are in service with other major municipalities in the United States. The Bidder is deemed eligible for offer as a substitute. The qualifications of the offering will be judged as to their conformance with these specifications. Any equipment offered other than herein specified will be subject to a competitive demonstration and evaluation by the using department. This demonstration is to be provided on request within ten (10) working days after the receipt of bids. The result of that demonstration and evaluation will be of prime importance in the recommendation to the governing body for the final contract award.

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Any item deemed as an "approved equal" must be approved by the City prior to the bid opening.

#### MODIFICATIONS TO THE STANDARD SPECIFICATION

#### 2.0 APPLICABLE SPECIFICATIONS

All line set ticket (actual part numbers and descriptions used in manufacturing), service, parts, operator, and preventive maintenance manuals will be provided in a computer readable media. Acceptable file formats are: ASCII, Microsoft Word, Excel and Access.

**2.1** Provide two (2) line set tickets for each unit delivered.

#### 3.0 CAB & CHASSIS

**3.1** CAB

Provide a fiberglass tilt hood with a stationary grill and LED clearance lamps.

**3.1.1** Provide an air suspension seat on driver's side; seat covering shall be heavy duty vinyl. Provide additional seating for two (2) passengers, with under seat storage compartment. All seats shall be provided with approved head rests. Provide high visibility seat belts.

Ref: Bostrom Talladega 910 hi-back, National Seats 2000

- **3.1.2** Provide an air ride cab mounting.
- 3.2 GVWR: 56,700 lbs. approximately Wheelbase: 200 inches approximately Cab-to-Axle: As required by body builder
- 3.3 CHASSIS BODY & CAB COLORS INCLUDING WHEEL RIMS
  - 3.3.1 White, Bright
    One step Urethane,
    or approved equal (DuPont / Sikkens / PPG)

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#### 4.0 COMPACTOR BODY AND HYDRAULICS

4.1 The compactor body shall be of the high density compaction type, 20 cubic yard rear loader with a 3 ½ CY hopper, loading height 42" maximum, compaction rate 1,000 per yard (minimum).

Ref: MCNEILUS HD, HEIL DuraPack 5000, LEACH 2R-III, NEW WAY King Cobra

#### ALL BODIES MUST BE SUPPLIED WITH THE FOLLOWING ITEMS:

- **4.1.1** Full tailgate liner (Contractors / Demolition Package) side and hopper floor.
- **4.1.2** External hydraulic tank with sight and temp gauge (see section 4.3.2).
- **4.1.3** Inspection door left side with auto hydraulic shut down when opened.
- 4.1.4 Ladder, left side.
- **4.1.5** Broom and shovel brackets, location to be determined.
- **4.1.6** Compactor Body Lighting System (ALL LAMPS SHALL BE LED)

Center mounted brake light shall be 7.5" x 3.4", sealed, shock proof and weather resistant.

**Ref: TRUCK-LITE LED (60250R)** 

Stop, turn and tail lamps shall be 4" round, sealed, shock proof and weather resistant, LED and shall incorporate a reflector. Lamp assemblies shall be mounted in a rubber grommet.

Ref: TRUCK-LITE LED, MODEL 44 (44202R)

Clearance and marker lamps shall be 2 ½" round, sealed, shock proof and weather resistant and shall incorporate a reflector. Lamp assemblies shall be mounted in a rubber grommet.

Ref: TRUCK-LITE LED, MODEL 10 (10250R/Y)

Back up lamps shall be 4" round, sealed, shock proof and weather resistant. Lamp assemblies shall be mounted in a rubber grommet.

**Ref: TRUCK-LITE LED, MODEL 44 SERIES** 

LED license plate lamp

**Ref: TRUCK-LITE LED, MODEL 15** 

Combination mid-mount side marker/turn signal lights, suitably protected with deflector bars, shall be installed at midpoint near the lower edge on each side of

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the body.

**Ref: TRUCK-LITE LED** 

# ALL LIGHTS SHALL BE SEALED UNITS, WEATHER AND SHOCK PROOF AND RUBBER GROMMET MOUNTED. ALL WIRING SHALL BE TRUCK-LITE, 50 LED SERIES-SUPER SYSTEM HARNESS

Provide two (2) back-up LED spotlights with the license bracket in the center of the bar, capable of utilizing all four mounting bolts.

Provide two (2) strobe lights, amber lens, with branch guard and cab control.

Ref: Federal Signal Ultra LED Model 252650-02SC (light) Federal Signal Model 448330 (guard)

#### 4.2 HYDRAULICS

- **4.2.1** Provide a transmission mounted hydraulic pump with sufficient clearance to facilitate removal. The pump, when operating at maximum pressure, shall have a suction vacuum of not more than 5".
- **4.2.2** Pump Commercial Intertech

Maximum operating pressure: 2,450 PSI

Working Flow and RPM: 35 GPM - @ 1,300 RPM

Note: Pump shall be flooded with oil at all times for cool operation, long life and reduced noise.

The dry valve mechanism shall be controlled through a solenoid activated air valve mounted near the pump. The solenoid switch shall be mounted in the cab with the wiring to run through the neutral safety switch.

The electronic overspeed control shall be through the engine ECM, wired to deactivate the dry valve (interrupt full flow) when the engine speed exceeds the operating speed.

**4.2.3** Reservoir - E - Z Clean side mount

(RESERVOIR LOCATION TO BE DETERMINED AT PRE-BID MEETING)

Capacity 50 gallons (U.S.)

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**4.2.4** Filters - (Premium Quality)

Outlet filter (suction) 100 mesh

Return filter with bypass 20 micron Microglass

**4.2.5** Spool valves

Tailgate/ Ejector Panel Spool Valve Commercial VA35
Automatic ejector blade relief
Force limiter for backbacking
Packer/Slide Commercial Intertech VA35
Automatic kickout for packer slide
Work port relief valves

**4.2.6** All hydraulic shut-off valves shall be ball type.

#### 4.3 SPECIAL REQUIREMENTS

- **4.3.1** Components such as air tanks, oil filter, fuel tanks, brake chambers, etc., shall be mounted as high as feasible to provide sufficient ground clearance for operation on a landfill and mounting of snow fighting accessories. The rear axle brake chambers shall clear a 14" square bumper log.
- 4.3.2 Provide an external hydraulic reservoir with a sight gauge (oil level and temp.) mounted on chassis frame (RESERVOIR LOCATION TO BE DETERMINED AT PRE-BID MEETING). The filler line with a quick disconnect coupling shall be mounted at ground level, curbside, for filling purposes.
- **4.3.3** Provide one (1) push button signal switch, shall be located on the curbside of the rear side panel and connected to a buzzer in the cab.
- 4.3.4 Two (2) bolt-on rear steps, one on each side, shall be provided. The steps shall be of expanded metal mesh with "sure grip design", rounded edges, approximately 10 x 24 inches, 20 inch ground clearance, complete with two vertical grab handles, approx. 12 inches long, knurled or equal "suregrip" design.
- **4.3.5** Provide one (1) caged LED floodlight, 50,000 cp. to illuminate the hopper area.
- **4.3.6** Provide all required reflectors, fastened with screws.

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**4.3.7** Chassis OEM multiplex wiring/switches must be utilized for all body functions and lighting.

#### 4.3.8 PTO OPERATION PARAMETERS

PTO and auto throttle advance, disengaged in any gear.

PTO and auto throttle advance on in neutral only with brake pedal depressed (cab control disable).

## 5.0 CAB & BODY EQUIPMENT

## 5.1 EQUIPMENT AND ACCESSORIES

- **5.1.1** Provide manufacturer's highest output integral heater, air conditioning and defroster system.
  - **5.1.1.2** Provide an insulated cab with a desert type ventilation system.
- **5.1.2** All gauges shall be electrical, illuminated, and shall include but not be limited to fuel, coolant temperature, oil pressure, voltmeter, tachometer, electronic speedometer and hour meter.
- **5.1.3** Provide two-speed electric windshield wipers with delay and windshield washer system.
- **5.1.4** Provide largest size padded sun visors available.
- **5.1.5** Provide dome light, doors and switch activated.
- **5.1.6** Provide heavy duty turn signal indicator with transistorized flasher.
- **5.1.7** Provide Safety Seat Belts that comply with DOT Rules and Regulations
- **5.1.8** Provide a side-view mirror on both sides of vehicle. Equip with foldaway brackets and mirror surfaces of at least 90 square inches each side. The lower section of mirror shall be convex or mount a 6 inch spot convex mirror on a separate bracket.
  - **5.1.8.1** Provide fender/hood mounted mirrors, both sides.

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- **5.1.9** Provide assist handles, approx. 10 inches long, both sides, for ease of access and egress.
- **5.1.10** Provide an AM/FM stereo radio, complete with antenna and two speakers.
- **5.1.11** Provide non-skid design surfaces, Grip Strut Grating type, for all exterior step surfaces. Provide entry steps as needed.
- **5.1.12** All units shall be keyed alike, provide two (2) keys per vehicle.
- **5.1.13** All glass shall be tinted safety glass. Doors shall be provided with operating vent windows (if available).
- **5.1.14** Provide full, heavy duty rubber floor covering throughout.
- **5.1.15** Provide LED cab lighting (if available)
- **5.1.16** Provide a body builder connection box, with 6 OEM dash mounted switches, minimum.
- **5.1.17** Provide air horn with control.

#### 6.0 FRAME

Any non-factory frame modification shall require the approval of the OFM. Chassis requires frame reinforcement. Single frame rails minimum requirements: 10 7/8" X 9/16" X 7/16" with a 120,000 PSI and a 2,590,200 RBM, **NOTE: DOUBLE FRAME RAILS ARE NOT ACCEPTABLE.** 

**6.1** Provide a front frame extension for snow plow mount, 12" minimum.

#### 7.0 AXLES & SUSPENSION SYSTEMS

7.1 Front springs shall match rating of axle capacity in pounds.

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- **7.2** Provide heavy duty shock absorbers.
- **7.3** Rear suspension shall be Hendrickson HMX series.
- 7.4 Front axle rating- 16,000 lbs. approx.

Rear axle rating- 46,000 lbs. approx.

- 7.5 Provide inter-axle lock/power divider
- **7.6** Provide synthetic oil with oil pump in all differentials.
- 7.7 Provide axles with piloted hubs.
- **7.8** Provide magnetic oil drain plugs.
- **7.9** Provide front axle hubs with oil bath front seals and synthetic oil.

#### 8.0 BRAKES

- **8.1** Provide anti-lock brakes, all wheels.
  - **8.1.1** Front brakes, air disc type, 22.5 diameter with non-asbestos brake lining **Ref: Bendix ADB22X-V or approved equal**
  - **8.1.2** Rear brakes, air disc type, 22.5 diameter with non-asbestos brake lining **Ref: Bendix ADB22X-V or approved equal**
  - **8.1.3** Provide highest quality factory brake chambers on all axles.
  - **8.1.4** Provide 13 CFM water cooled air compressor, gear driven if available.
- **8.2** Provide an air dryer.

Ref: Bendix AD / IP, AS-9SI, or approved equal

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#### 9.0 ENGINE

**9.1** Provide a wet sleeve diesel engine, six (6) cylinder turbocharged, electronically controlled.

300 HP @ 2000 rpm (min.), approx.

860 FT. LBS. Torque (min) @ 1300 rpm, approx.

Ref: Cummins ISL - G NERO ZERO

**9.2** Provide heated fuel-water separator with primer pump.

## 10.0 ENGINE EQUIPMENT

- 10.1 Provide an engine governor, to achieve a maximum road speed of approximately 65 mph. while fully laden (GVWR) through transmission and rear axle ratios. The vendor shall supply performance curves or tables showing the proposed vehicle road speed and torque characteristics at various grades under fully laden conditions.
- **10.2** Provide manufacturers engine protection/monitoring system.
- 10.3 Provide engine block heater with not less than 200 degrees F., 120 volt, single phase, water jacket preheater.
- **10.4** Provide magnetic drain oil plug.
- 10.5 Provide vertical exhaust pipe with a rain shield or turnout and a stainless steel personnel guard, on all exposed piping.

#### 11.0 TRANSMISSION

- 11.1 Provide an automatic transmission for refuse vocation, ALLISON 3500 RDS P 5-speed with overdrive, compatible with all other drive train components. Provide synthetic oil.
- 11.2 Provide an externally mounted auxiliary oil cooler.
- 11.3 Transmission operating instructions shall be permanently mounted inside the cab near the transmission shift pad.

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- 11.4 Transmission selector shall be electronically controlled, dash-mounted with an oil level indicator, or equal, shift-shock mechanism.
- 11.5 Transmission selector shall be equipped with a neutral range inhibitor.
- 11.6 Provide magnetic oil drain plug.

#### 12.0 STEERING

- **12.1** Provide power steering, manufacturer's standard.
- **12.2** Provide tilt/adjustable steering column.
- 12.3 Provide oil/air power steering cooler.

#### 13.0 ENGINE COOLING SYSTEM

- 13.1 All coolant hoses shall be heavy duty rubber type equipped with spring type constant torque stainless steel clamps.
- 13.2 Provide long life permanent antifreeze, protection to -34 degrees Fahrenheit to meet OEM engine specifications.
- **13.3** Provide thermostatically controlled or viscous fan.

#### 14.0 ELECTRICAL EQUIPMENT

- 14.1 Provide dual batteries (group 31) with the highest reserve capacity, 800 CCA each, min. Nominal System Voltage: 12 volt, negative ground. All circuits shall be protected by circuit breakers or fuses. All wiring shall be color coded or number coded, protected by plastic loom and rubber grommets.
- 14.2 Provide a brushless type alternator sufficient in capacity to support the electrical system specified, when used under severe conditions, 160 amps @1500 rpm, min.
- 14.3 Provide a heavy duty gear reduction starter with over crank protection.

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## Ref: Delco Model 39MT or approved equal

14.4 Provide a remote jump start stud, located at starter or battery box.

#### **15.0 TIRES**

15.1 Tires shall be "First Line" and the type listed below:

Front tires: 12R22.5

Rear tires: 11R22.5 M/S

- **15.2** Provide steel BUDD type wheels only.
- 15.3 Provide wheel separator plates between all wheels and hubs.

Ref: Accuride nylon wheel guards or approved equal.

**15.4** Provide high visibility green loose wheel nut indicators at all wheel positions of the vehicle.

**Ref:** Wheel-Check or approved equal.

15.5 Provide rear tandem tire and rim configuration in standard dual rear wheel configuration.

#### 16.0 FUEL SYSTEM

- **16.1** Provide 60 diesel gallon equivalent (DGE) minimum, with auxiliary engine high pressure supply port and filter, mounted on back of cab.
- **16.2** Provide standard fill receptacle and dust cap, and defueler receptacle.
- 16.3 Provide single CNG fuel line with in-line solenoid shutoff valve and pressure regulator.
- 16.4 Provide stainless steel and synthetic rubber flexible fuel lines Natural Gas Service.
- 16.5 Provide CNG fuel heating system.
- 16.6 Provide BLUE IQ communication between fuel tank and dash gauges.

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#### 17.0 SAFETY EQUIPMENT

- 17.1 Provide fire extinguisher (2.5 lbs.), reflective triangle kit both cab mounted.
- 17.2 Provide back-up alarm.

Ref: ECCO, SA 907 series, or approved equal.

17.3 Provide an environmental spill kit, mounted on the side of the unit. (Minimum – 5 Gallon Universal Spill Kit, (2) Containment Socks, (12) Absorbent Pads, (1) 5-Gallon Bucket w/lid, (1) pair rubber gloves, (1) 5 pound bag of UltraSorb and (1) 35 Gallon Ultra Trash Bag)

18.0	WARRANTY (100% Parts and Labor and Travel Time, no deductible).
	Less wear items, a list of wear items must be submitted with bid.
	BIDDER INITIALS

Engine

Full Base Coverage, Complete engine

2 years / 150,000 miles

including fuel injectors.

Extended Coverage (After Base Coverage)

Covers all these components, including but not limited to

mounting hardware and gaskets; cylinder

heads; rocker lever; ECM; Injectors, pistons, rings

and liners; lube oil cooler; cylinder block;

oil pan; connecting rod assembly; lube pump

assembly; camshaft and bushings; cam followers;

major cooled EGR components 3 years / 150,000 miles

Note:

Total Engine Coverage Base / Extended Combined - 5 Years / 150,000 miles / Unlimited Hours

Differential 5 years / 150,000 miles Transmission 2 years / unlimited

Cab & Chassis (Bumper /Bumper) 2 years / unlimited

All components ie: utilized in starting, charging, accessory

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systems including harness, sensors, modules, cranking motors, alternator, regulators etc.

To in wi	npactor (complete unit) 2 years / unlimited include all components utilized operating the compactor body including ring harness, sensors, modules, hydraulic ntrols & related components	
All Hydra Hydraulic All Addit	ulic Cylinders 5 years / unlimited System (hoses, etc.) 2 years / unlimited fonal Equipment 1 year / unlimited appactor (Structural) 5 years / unlimited	
NOTE:	All minor repairs (over four (4) labor hours) shall be performed within 2 working days, Sundays excluded.  BIDDER INITIALS	
	All major repairs shall be performed within 7 working days, Sundays excluded.  BIDDER INITIALS	
	All warranty work performed by City forces will be billed at the rate of \$52.00/hour.  BIDDER INITIALS	
	Transportation to and from the vendor's site, if required, is the successful bidders responsibility. If transportation is performed by City forces it will be invoiced at \$52.00/hour (each round trip) or towing cost.  BIDDER INITIALS	
	If the time intervals for minor and major repairs are exceeded, the City of Philadelphia reserves the right to perform warranty work with direct invoicing to the successful bidder, not the manufacturer.  Copies of Warranty Repair Orders shall be forwarded to the Office of Fleet Management within five (5) days after completion of each repair, including all cost for parts and labor.  BIDDER INITIALS	
	WARRANTY REGISTRATION	
MUST BE FILLI FIRM (VENDOR	ED IN AS) NAME BID NUMBER OFM SPEC CODE 32831CNG.12	

The City of Philadelphia requires the successful bidder supply **WARRANTY REGISTRATION** of all warrantable components.

The warranty registration forms shall be supplied to the City, by the successful bidder, listing component description and serial number and chassis serial number. Each form shall require the signature of a representative of the City (OFM), the successful bidder and the subcontractor, where applicable.

If the successful vendor or their subcontractor supply a standard warranty registration form which includes disclaimers, the City reserves the right to refuse to sign. If no other registration for can be supplied the City shall sign the standard form as a "REGISTRATION ONLY".

BIDDER INITIALS

The City recognizes only the warranty terms cited in the <b>Invitation to Bid</b> and
agreed to in the contract awarded to the successful bidder, under Warranty, section

The City reserves the right to hold final payment until all warranty registrations are completed and a copy of such registrations supplied to OFM.

18 and Engineering Responsibility & Chronic Complaints/Failures, Section 35.

BIDDER INITIALS	
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#### 19.0 PRE-PRODUCTION INSPECTION

- 19.1 Provide the Office of Fleet Management one (1) pilot inspection for the chassis at the manufacture plant, for one (1) person on each inspection trip. The successful bidder shall incur all expenses for lodging, meals, and transportation (transportation will be via air if more than 125 miles one way).
  - 19.1.1 Provide the Office of Fleet Management a virtual pilot inspection for the chassis if available. The manufacturer shall provide to the City of Philadelphia the opportunity to review their unit as it proceeds through the production stages, from within the City of Philadelphia. The City shall provide either wireless connectivity, or pre-established teleconferencing capabilities to make this happen. The manufacturer's representative shall travel to the City to coordinate and take part in these reviews. The corporate personnel shall be involved from the location of the manufacturing facility.

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- 19.2 Provide the Office of Fleet Management one (1) pilot inspection for the superstructure at the manufacture plant, for one (1) person on each inspection trip. The successful bidder will incur all expenses for lodging, meals, and transportation (transportation will be via air if more than 125 miles one way).
  - 19.2.1 Provide the Office of Fleet Management a virtual pilot inspection for the superstructure if available. The manufacturer shall provide to the City of Philadelphia the opportunity to review their unit as it proceeds through the production stages, from within the City of Philadelphia. The City shall provide either wireless connectivity, or pre-established teleconferencing capabilities to make this happen. The manufacturer's representative shall travel to the City to coordinate and take part in these reviews. The corporate personnel shall be involved from the location of the manufacturing facility.

#### 21.0 QUESTIONS REGARDING BID

All questions regarding Bid Specification should be directed to the Procurement Dept and PHL Contracts vendor website login;

PHL Contracts - www.phlcontracts.phila.gov/bso/

22.0	<b>ILLUSTRATIONS &amp; DRAWINGS</b>
	REQUIRED FOR THIS BID
	BIDDER INITIALS

All bidders shall submit with their bid a dimensioned weight distribution chart showing an unladen and a fully laden compactor including chassis.

#### 24.0 CERTIFICATION OF COMPLIANCE WITH SPECIFICATIONS

The bidder shall certify on the form furnished with the Invitation and Bid that the Truck, component units, and parts shall be suitable for the work to be performed and will be constructed to definite standard dimensions, with proper clearance and fits; that previously published or set ratings shall not arbitrarily be raised without prior approval of the manufacturer of the actual unit and further, that the truck offered shall comply in every respect with the terms of this specification. In the event that the truck offered does not comply with this specification, the bidder shall state definitely, referring to the proper paragraph of this specification, where the Truck he proposes to furnish does not comply. Where no statement is received, the successful bidder shall be required to meet every requirement of the specification.

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#### 25.0 REQUIREMENTS

General - Though they shall not be specifically enumerated herein, all parts necessary to provide a complete and efficient truck shall be furnished. All parts shall conform to current engineering practices of the industry relative to design, strength, quality of material and workmanship. The City reserves the right, at its option alone, to accept trucks with minor deviations from this specification.

#### 26.0 MATERIALS

The Truck and all parts thereof shall be made of materials which are suitable for the intended service and shall be produced by current standard manufacturing processes. The materials shall be free from characteristics or defects which affect the appearance or which shall affect the proper functioning of the finished product.

#### 27.0 GROSS VEHICLE WEIGHT AND DRY CHASSIS WEIGHT RATINGS

These shall be as specified in the Invitation to Bid. The gross vehicle weight rating shall include the weight of the complete chassis and cab.

#### 30.0 SHIPMENT AND DELIVERY

30.1 Delivery Information - Final Delivery shall be made between the hours of 8:00 AM and 2:00 PM, Monday through Friday, except City Holidays. Each unit shall be accompanied by a Delivery Slip which will contain the City's Bid Number, Item Number, Purchase Order Number, and Serial Number of the Unit.

VENDOR MUST NOTIFY OFM, TH DELIVERY. BIDDER INITALS	IIRTY (30) DAYS PRIOR TO MAKING ANY
DELIVERY CONTACT PERSON:	LANCE WILUS (215-686-1875) OFFICE OF FLEET MANAGEMENT 100 S. BROAD STREET, 3RD FLOOR PHILADELPHIA, PA 19110
DELIVERY LOCATION:	OFFICE OF FLEET MANAGEMENT SHOP 415
MUST BE FILLED IN FIRM (VENDORS) NAME	BID NUMBEROFM SPEC CODE 32831CNG.12

# 3895-99 RICHMOND STREET PHILADELPHIA, PA 19137 PHONE (215) 685-1336

#### 30.3 DELIVERY CONDITIONS

**30.3.1** Vehicles, regardless of delivery point, shall be ready for use including all lubricants, coolant and operating fluids as required, minimum of 30 gallons of diesel fuel, equivalent amount of diesel engine fluid, if required. Battery shall be fully charged, tires properly inflated.

#### 31. INSPECTION

- 31.1 Pennsylvania State Inspection Each vehicle shall pass the Vehicle Code Examination of the Department of Transportation, Commonwealth of Pennsylvania; when delivered, chassis vendor shall have attached current State Inspection Stickers in the proper location.
- 31.2 Exhaust Emissions Inspection All vehicles with GVW's subject to the provisions of the Pennsylvania Department of Transportation exhaust emission regulations must meet said requirements and have the appropriate sticker affixed to the windshield, along with the State Vehicle Inspection Sticker, when the vehicle is delivered to the City.
- **31.3** City Delivery Inspection

City Inspection of delivered vehicles will be conducted at the specified delivery point. It will be conditioned upon the satisfaction of all of the requirements of this specification and the Invitation to Bid.

Upon **final delivery to the City**, any vehicle(s) not meeting the requirements of the specification and the Invitation to Bid will be rejected. All rejected vehicles must be removed from the City's equipment delivery location within 48 hours of notification to the bidder / vendor.

<b>BIDDER</b>	<b>INITIALS</b>	

Upon **final delivery to the City**, in addition to liquidated damages (if applicable), the City at its sole discretion will charge the vendor / successful bidder a re-inspection fee of \$150.00 for each occasion a vehicle(s) / equipment not meeting the requirements of the specification and Invitation of Bid. This re-inspection fee will be assessed for each occasion a unit must be re-inspected.

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		requirements of the specification and the Invitation to Bid.  BIDDER INITIALS
	31.4	OFM, Bureau of Quality Assurance, shall be notified when the pilot or first production model is available for inspection.
32.0	CERT	IFICATIONS & MANUALS (PER ORDER)
	32.2	Provide the necessary documents for the City to take Title to the vehicle in accordance with the Pennsylvania Motor Vehicle Code. ALL THE ITEMS, INVOICE (STATE ORIGINAL), MSO, MV-1, 2 <sup>nd</sup> STAGE STICKER, ETC) ARE TO BE HAND DELIVERED FOURTEEN (14) DAYS PRIOR TO DELIVERY TO:
		Unladen weight of the completed unit shall be supplied for each unit.
		CITY OF PHILADELPHIA OFFICE OF FLEET MANAGEMENT BUREAU OF QUALITY ASSURANCE 100 S. BROAD STREET, 3RD FLOOR PHILADELPHIA, PA 19110
	32.3	Operation, Maintenance and Repair Data Prior to the delivery of the first units, the vendor shall forward directly to the Office of Fleet Management, Maintenance, Operating and Repair manuals and Parts Lists as specified below. The manuals shall be shipped separately to OFM 100 S. Broad Street 3rd Floor, Phila, Pa. 19110 and not with the units. All manuals shall be in the form of neatly bound books, with durable covers, and shall be properly identified with the manufacturer's name, model and serial number of the equipment.
		The operating and maintenance or shop manuals shall be the latest manufacturer's handbook, covering in detail the recommended operating, maintenance and service procedures.
		Where components or equipment of several manufacturers have been used in manufacturing the unit, the manuals shall include operating, maintenance and repair
		LLED IN ORS) NAME BID NUMBER OFM SPEC CODE 32831CNG.12

This re-inspection fee will be deducted from the invoice for unit(s) not meeting the

information and parts lists of all manufacturers covering all of the components used. Where the vendor or manufacturer uses components manufactured by other in building equipment which he sells under his own trade name, he shall furnish the parts numbers and full data of the original manufacturers of all components used, where possible, as well as the part numbers he may assign to these components as being parts of his product.

#### **32.3.1** One (1) set of manuals shall be furnished for each unit delivered.

Each manual shall cover chassis, superstructure, engine, transmission, differential, hydraulic system and all other added equipment. Operating Instructions and schematics including:

Maintenance Instructions Emission Diagrams
Repair Instruction Electric Wiring Diagrams

Parts Information Collision

Provide an eight year subscription to all manufacturer issued Service Bulletins (two for each vehicle supplied under this order)

NOTE: Provide two (2) additional sets of operators manuals, these manuals are to be delivered one month prior to delivery.

#### **32.3.1.1 SOFTWARE**

Provide software package(s) for all components: engine, transmission, brake, hydraulic and electrical systems. Cost shall include all required hardware (excluding a computer), and all licensing fees for one year.

BIDDER	INITIALS	5
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#### **32.3.2** Preventive Maintenance Instructions

In addition to the manuals specified above, the vendor shall furnish an equal number of condensed Preventive Maintenance Instructions for all parts of the unit. These instructions shall consist of manufacturers' recommendations for periodic lubrication, cleaning and other preventive maintenance services, and shall be made up in a compact from covering the particular unit delivered.

#### **32.3.3** Recommended Spare Parts

The vendor shall furnish with each service manual a list of recommended spare parts. The list shall include all necessary data for ordering the parts, even if

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originally furnished by other manufacturers. The vendor warrants that they shall maintain or have maintained a stock of repair parts within the Philadelphia Metropolitan area at inventory levels for the period described hereafter:

The manufacturer shall supply, through a dealer, a published price list for spare parts required to support the units to be manufactured hereunder for ten (10) years from the date of delivery of the last unit.

Technical and field service support shall be provided by the vendor, if necessary. This support shall be by personnel qualified to advise on training, repair and maintenance of the equipment. The technical representatives shall be available in the Philadelphia Metropolitan area when required by the City.

The repair or shop manuals shall include but not be limited to detailed drawings, electric, pneumatic and/or hydraulic schematics, piping diagrams and other pertinent information.

#### **33.0 SIGNS**

Signs, decals, and etc. showing dealer's name and/or address, shall not be permitted on the outside of the unit.

33.1 Manufactures name (s), address and striping shall be removed before delivery.

#### 34.0 INSTRUCTIONS & TRAINING

The vendor shall furnish three (3) video training films, DVD, covering the following subjects (if available):

Operator Training Routine Maintenance Preventive Maintenance

If the vendor does not have at time video training films available at the time of the bid opening, it shall be acceptable to the City that the vendor tape the training sessions at the time of the training, making three (3) copies available to the City.

In addition, the vendor shall instruct City employees in the operation, servicing and maintenance of the units or equipment delivered at the following City facilities and at such times as the

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Engineer may designate, all within thirty (30) days after final acceptance of the first unit.

34.1	Operators:	Location to be determined
	Two	one-day programs

34.2	Technicians:	Location to be determined
	Three	five day programs, for five technicians at a factory training center
BIDD	ER INITIALS	L

#### 35.0 ENGINEERING RESPONSIBILITY & CHRONIC COMPLAINTS/FAILURES

The term CHRONIC COMPLAINTS/FAILURES, as used herein, shall mean that the same component, sub-component, assembly or part, such as an engine, transmission, differentials, hydraulic system, pumps, etc. including valves, controls, water pumps, high pressure water systems, etc. develops repeated defects, breakdowns, and/or malfunctions.

The responsibility for the design of this equipment shall rest upon the successful vendor, and they shall consider all elements of operation for which the warranty shall apply. The successful vendor shall be responsible for the compliance and performance of each subcontractor, including all suppliers.

Where the equipment, units= and/or sub-components develop CHRONIC COMPLAINTS /FAILURES during service operations, the successful vendor will be required to make any engineering design changes, repairs, alterations, retrofits or to make an adequate heavy duty redesign of any component so as to properly correct and continue to render continuous, durable and safe performance. Warranty periods shall be for an additional one year, measured from the completion date of any corrective measures. This additional warranty shall not expire at the end of the initial warranty period even when the correction is performed in the last days of the original, stated, warranty period.

Minor items or ordinary service adjustments are not included nor considered under this scope of CHRONIC COMPLAINTS/FAILURES. Conditions caused by other factors such as operational damage due to accidents, vandalism, misuse, or lack of proper maintenance, service, lubrication as prescribed or recommended by the Original Equipment Manufacturer (OEM), are also excluded. Records and reports will be maintained by the Office of Fleet Management and will be made available for the successful vendor's periodic examination relative to CHRONIC COMPLAINTS/FAILURES.

The successful vendor shall provide written reports to the City, detailing the action taken as a

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result of a notice of complaint describing the failure. Any written notices of complaints or field action with corrections made, shall be forwarded directly to the Office of Fleet Management, 100 S. Broad Street, 3rd Floor, Philadelphia, PA 19110, Tel. (215) 686-1825, FAX (215) 686-1829, in numbered report identifying the vehicle's property number, part or serial number of the failed component, with copies to the Bureau of Quality Assurance, same address.

For a fair and equitable evaluation of the CHRONIC COMPLAINT/FAILURE, the successful vendor, when notified of service difficulties, will be permitted to make detailed studies, analyze operational conditions and will have access to the equipment in order to make recommendations for corrections so as to obtain the desired safe and durable mechanical performance.

To reduce or eliminate CHRONIC COMPLAINTS/FAILURES on equipment, the City, as part of this contract, shall designate a Technical Review Committee, consisting of the Fleet Manager, Fleet Engineer, Deputy Fleet Manager and Operations Manager of the affected equipment, to review, analyze and evaluate any successful vendor's remedies.

In the event the successful vendor fails to address, or make the proper changes, repairs, modifications, retrofits, or does not render field service after written notice, or unnecessarily delays any actions, the Office of Fleet Management shall have the option of seeking appropriate restitution for loss of production.

The successful vendor shall also be subject for Loss of Use, in the form of rental, lease payments, or a \$200.00 per day fee, while a vehicle is rendered unserviceable or out-of-service.

# 36.0 OPTIONAL EQUIPMENT (INSTALLED AND PRICED SEPARATELY)

# 36.1 SNOW PLOW (SNOW PLOW HITCHS AND PLOW BLADES SHALL BE CABIPABLE WITH THE PRESENT CITY HITCHS AND PLOW BLADES)

It is the intent to describe a snow plow, power up, manual rotation. The plow assembly shall have quick hitch mounting. The moldboard shall be approx. 10 feet wide, 36 inches high, made of 10 ga steel with integral shield. The snow plow shall have replaceable cutting blades. A rubber cutting edge shall be supplied. Provide plow guide poles, two 36" fluorescent orange, snow plow deflector, curb guards for plow.

**TRIP MECHANISM-** The plow and plowing vehicle shall be protected from damage incurred when striking a fixed object by means of a compression type trip.

SCREW ADJUSTABLE SKID SHOES - The plow shall be carried by means of screw

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adjustable skid shoes. The screw assembly shall have a minimum of  $1\frac{1}{4}$ " heavy duty Acme thread. The shoe assembly must pivot and oscillate. The skid shoes shall be high carbon, minimum size of 1" thick X 6" wide X 17' long with turned up ends.

REFERENCE MODELS: MONROE, MP 36R10ISCT HENKE, 36R10 HENDERSON, SNOWFOE VIKING, METROPLITAN

36.2 PLOW HITCH PORTION - The plow portion of the quick hitch must have a minimum of 7" of taper built into the jaws to allow for approximately 7" of vertical misalignment when attaching the plow to the truck. The snow plow push frame shall be designed with an automatic quick hitch type latching mechanism. This latch mechanism is to be retained to the push frame with two (2) 5/8" x 3" x 4" structural steel angle irons and one (1) 1 1/4" x 4 1/2" grade #5 bolt castellated nut and cotter pin. The design of the latch mechanism shall allow the plow to swivel freely so that it can follow the contour of the road. The two spring loaded automatic quick coupling devices shall be welded to a 7" x 22.7# ship and car channel. Latching mechanism's shall be automatic, spring loaded, adjustable and have a single lever to release the two (2) 1 1/2" x 1045 steel latching mechanisms. A single locking lever shall be retained in either the lock or the release position. In the locked position the truck must be able to be driven into the hitch and have it lock automatically.

**REFERENCE MODELS:** 

REF: VALK VMC110T-LP-QCP

**American Road Machinery (ARM)** 

#### 36.3 PLOW TRUCK PORTION

Provide a Lo Pro Bumper to Frame Quick Hitch with plow lift cylinder model CS300, a 3" x10" single acting with a plow holding valve. Release on 30-1/2" centers an MC 50 thrust arm mounting kit. Chassis to have stationary grill, tilt hood plow lights and turn signals Truck Lite model 80800. Hitch to be designed so that it can be driven into when the truck and plow are misaligned and locked into place automatically. Hitch designed to be installed inside frame rails on chassis without modifying the frame. Hitch to incorporate a double locking mechanism.

**REFERENCE MODELS:** 

Valk Plow Model PH1036-116iPR-ECT American Road Machinery (ARM) – Tough Equipment

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#### **PLOW LIGHTS**

Two (2) plow lights with Hi-Lo rectangular sealed beams and turn signals, light housing and bezel shall be made of impact and corrosion resistant polycarbonate - plow lights. Plow lights shall be hood mounted with aluminum brackets in a fashion not to interfere with the truck hood if tilted but be sufficient height to provide proper plow clearance. When plow lights are on, the truck headlights are to go off automatically. Lights shall be equipped with a quick disconnect harness to facilitate removal for the off season.

Ref: TRUCK-LITE Model 80800, or approved equal.

#### 36.4 PLOW CONTROLS

Provide an electric/hydraulic lift up with a gravity down regulated by an adjustable flow control valve, pump and motor, **HD 303-10" tank**. Electric wires shall be covered with loom, sleeved, with connections soldered and shrink-wrapped. Provide a one hundred and fifty (150) amp in-line circuit breaker. The plow motor shall have dripless Quick Couplers. Install safety and instruction labels. All hydraulic hose, nylon hose sleeves, fittings, dripless connectors shall have protective clamps and brackets to secure hydraulic lines. Provide an enclosure fabricated from 12 gauge C.R.S. steel.

#### 36.5 REEVING CYLINDER

Provide reeving cylinder and latch kit.

### 36.6 SIDE GUARDS (BICYCLE/PEDRESTIAN PROTECTION)

Provide side guard protections between all open spaces.

#### "SIDE GUARD PROTECTION MUST BE VOLPE COMPLIANT"

#### 36.7 REAR VISION CAMERA

Provide a rear vision system with two (2) LED lights that operate in reverse only. Monitor shall be a 7" minimum display. Cable shall be run through a protective conduit through hopper and on top of body

REF: Intec, Rosco, Brigade, Pro-Vision, or APPROVED EQUAL

#### 36.8 REAR AND SIDE VISION CAMERA

Provide a rear and side vision system with two (2) LED lights that operate in reverse only. Camera system shall only work when turn signal or reverse signals are activated. Monitor shall be a 7" minimum, split screen display.

Cable shall be run through a protective conduit through hopper and on top of body

REF: Intec, Rosco, Brigade, Pro-Vision, or APPROVED EQUAL

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# 36.9 360deg ALL AROUND CAMERA SYSTEM

Provide a 360deg camera system, with 4 cameras (right side, left side, front, and rear).

Provide 7" monitor (min).

Provide birds eye view

Provide video storage capability

REF: Intec, Rosco, Brigade, Pro-Vision, or APPROVED EQUAL

# 36.10 Provide ROSCO left and right fender mirrors

**REF:** 

#### 36.11 OPTIONAL COLOR

36.11.1 FAA Approved Safety Yellow, Cab Complete Unit

36.11.2 FAA Approved Safety Yellow, Body

### 36.12 75DGE BEHIND THE CAB FUEL TANK

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# CNG FUELING STATION RFP Additional Questions, 1/23/19:

1. Please clarify the required prevailing wage determinations for this project and provide the corresponding Department of Labor and Industry Project Serial Number (if available at this time).

#### Answer:

The Prevailing Wage Rates that will be used for this project will be City of Philadelphia Building Rates and will be issued at Settlement/Pre-Construction Meeting. The Prevailing Wages will be monitored by the Philadelphia Redevelopment Authority Wage Compliance Dept. There will be no Serial Number as we are using City of Philadelphia Wage Rates not State of PA.

2. Would the Authority be able to provide answers to bidders' questions by 1/16/19? We anticipate that providing answers five business days before the RFP deadline will give bidders sufficient time to update pricing.

#### Answer:

Answers will be posted 1/23/19

3. The RFP states that there is no contract specific diversity target, but also states a citywide goal of 35% M/W/DSBE (Attachment A, p. 2/5). Would the Authority accept the primary bidder's subcontractor's Good Faith Effort documentation or are primary bidders required to perform a separate Good Faith Effort with our proposals?

#### Answer:

The City of Philadelphia goal is 35%. The bidder must make a "Good Faith effort" to achieve these goals

4. Would the Authority add a requirement for bidders to describe their "Station and Maintenance Plan" after section "C. Contractor Qualification" of their proposal responses? This additional content will give the Authority access to information to better evaluate each bidder's solution and capability.

#### Answer:

**Approved** 

5. Please confirm that the Authority is looking for a total of 43 time-fill spaces installed. Specifically, 30 of those time-fill spaces should be complete assembly, meaning hose, retractor and nozzles are included. The remaining 13 spaces should only include the plumbed posts on k-rail where the City can simply install the hose, retractor and nozzles at a later date when the City procures more CNG trucks.

#### Answer:

Correct

6. Please confirm that the Authority is also looking for one fast fill hose/post.

#### Answer.

Correct, however, the station must be designed to be expandable without changing the Infrastructure.

7. With regards to the 5-year Guarantee/Warranty on equipment, would the Authority please add another pricing line item under the O&M FEE Section and allow bidders to provide this cost separately from the Fixed Monthly O&M Fee? This approach will also allow the City to see cost separately for budgeting purposes.

#### Answer:

A 5-year warranty must be listed separately as an additional cost.

8. Can the Authority please confirm that the compressors should be sized based on the confirmed PGW guaranteed 10 psi to the station?

#### Answer:

It is the City's' intent to have a well-designed CNG time fill station with fast fill capability of refueling multiple vehicles in succession (up to 25) under the pressure parameters described in the attached agreement from Philadelphia Gas Works. Station must be designed to operate at the **minimum** guaranteed supply Pressure.

9. Please confirm that you want the compressors to deliver a minimum of 450 SCFM (3.6 GGE/minute) to the fast fill post.

#### Answer:

Correct

#### Additional items.

• Proposals must contain in detail, the operation and maintenance plan that would be implemented.

October 25, 2018

RE: Order # 10051341

Mr. Christopher P. Cocci Fleet Manager City of Philadelphia, Office of Fleet management 100 South Broad St. Philadelphia, PA 19110

Dear Mr. Cocci:

With reference to your request for gas service at 3033 S 63<sup>rd</sup> Street, I am pleased to inform you that PGW will be able to provide the requested gas supply facilities at no charge. This is in accord with "Rule 10' of the PGW Gas Service Tariff, which allows PGW to install gas supply facilities at no charge to the customer when the estimated cost of installation is warranted by the anticipated annual net revenue from the installation.

The anticipated annual net revenue for 3033 S 63<sup>rd</sup> Street is based on the projected usage of: (2) 150 HP CNG compressors. Of course if your plans change prior to the installation, please let PGW know. We will re-estimate your anticipated usage to determine if you qualify.

You should note that the gas pressure at this location is high pressure; therefore, PGW will supply unregulated gas to this location. PGW will guarantee an operating pressure of 10 psig at the outlet of our meter (currently this main operates at 17 psig, however PGW will only guarantee 10 psig at the meter). The meter will be installed outside so you must provide adequate space for servicing and maintenance of the meter. PGW will require you to provide a concrete pad to support the meter and bollards as per PGW specifications to protect the meter.

If you choose to proceed with the installation, please return a signed copy of this letter to my attention at the address listed above. Upon the selection of your vendor for this project, we will require that the awardee sign a Facilities Installation Agreement and provide PGW with a security deposit in the amount of \$77,093. Once the contract is signed by the awardee, we will then proceed to finalize our plans and schedule the installation of the required gas supply facilities. The contract will be fulfilled and their security refunded once PGW turns on the gas, verifies that the proper equipment was installed and the account is on in the City of Philadelphia's name.

This letter is dated October 25, 2018 and is valid for a six-month period, after which time it will be reviewed and updated. This could result in a higher estimated cost and an additional charge for the installation of the gas supply facilities. We appreciate you providing PGW the opportunity to serve you. If you have any questions regarding this matter, please feel free to telephone me at (267) 249-7624.

Sincerely,  John F. Murray  Major Accounts Executive Philadelphia Gas Works	PLEASE SIGN BELOW	
	Customer's Signature	Date
	Print Name	

