

# APPENDIX A - TECHNICAL SPECIFICATIONS

## Bulk Liquid Caustic Soda – Membrane Grade

### 1. SCOPE OF WORK

JEA intends to enter into an agreement with a Supplier that can reliably furnish and deliver Bulk Liquid Caustic Soda for pH control and regeneration of demineralizer / condensate polisher systems at its Northside Generating Station (NGS) which is located at 4433 William Ostner Road, Jacksonville FL 32226. It is anticipated that a single contract will be awarded to the lowest responsive and responsible bidder who meets or exceeds the specifications described below.

### 2. GENERAL PRODUCT REQUIREMENTS

- 2.1 Liquid Caustic Soda must meet the specified chemical requirements described in Paragraph 6 of the Technical Specifications.
- 2.2 JEA reserves the right to test all shipments of Liquid Caustic Soda. If the product does not meet the required specifications, JEA retains the option of requiring the Supplier to remove the product, at its own expense, and replace with a product that meets the stated specifications.
- 2.3 At JEA’s sole discretion, Liquid Caustic Soda that has been contaminated by a Supplier during shipment will be replaced at the Supplier's expense within two (2) calendar days of notification. The Supplier will be responsible for proper disposal of such contaminated product and for any damages incurred by JEA in use of the contaminated product.

### 3. FACILITY LOCATION AND CONTACT

- 3.1 The JEA Contract Administrator or their designated representative shall be the primary contact and provide authorization for Liquid Caustic Soda purchases and deliveries. To facilitate “Supplier Responsibilities”, the Vendor shall, upon award, provide a company contact to the respective JEA managers responsible for implementation.

3.3	<u>JEA NGS Contact:</u> Josh Reynolds Northside Generating Station 4377 Heckscher Drive, Jacksonville, FL 32226 (904) 665-6737 Office	<u>Tank Capacities</u> 1 x 12,500 gal. 1 x 10,000 gal.
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### 4. SUPPLIER RESPONSIBILITIES

- 4.1 Liquid Caustic Soda purchased and delivered under this specification shall meet or exceed the Technical Specifications. Safety Data Sheet (SDS) documentation shall be provided for the product specified herein.
- 4.2 Liquid Caustic Soda that is purchased and delivered under this specification shall be requested on an “as needed” basis at the discretion of the responsible JEA Contract

Administrator. There are no guaranteed minimum amounts associated with this solicitation. Supplier shall deliver the quantity ordered to the location specified within forty-eight (48) hours after receipt of order unless other arrangements are mutually agreed upon and made with the responsible JEA Contract administrator.

- 4.3 Supplier shall furnish a Certificate of Analysis and Bill of Lading for each delivery.
- 4.4 Invoices for Liquid Caustic Soda purchased shall indicate the delivery location, amount of product delivered, date of delivery, product name and Unit Price, and total price of product. At a minimum, enough information shall be included to verify the accuracy of the invoice. Invoices for purchases shall be submitted monthly or as mutually agreed upon by JEA and the Supplier.

**5. JEA SAFETY REQUIREMENTS FOR SUPPLIERS**

- 5.1 All Supplier personnel, including subcontractors (i.e., transportation firm) who come on-site to JEA must meet the minimum safety training qualifications as required by OSHA and JEA. Information on the JEA Contractor Safety Program is found on our website [jea.com](http://jea.com)
- 5.2 Supplier, and their subcontractors (i.e., transportation firm) shall supply all appropriate PPE and perform their work in accordance with OSHA and JEA Contractor Safety Program as well as any JEA Site-Specific Training (SST).
- 5.3 In the event a safety hazard or spill should occur, the Supplier shall provide twenty-four (24) hour emergency response and service to correct the problem.
- 5.4 Supplier shall provide equipment designed for the safe delivery and off-loading of specified material. Supplier’s trucks shall be equipped to safely handle and unload Liquid Caustic Soda including, but not limited to, compressed air supply or pump, proper fittings, and the means to capture product samples for QA/QC purposes.

**6. LIQUID CAUSTIC SODA - CHEMICAL SPECIFICATIONS**

- 6.1 Liquid Caustic Soda is typically used in pH control of condensate polishing systems and demineralized water treatment at NGS.

Liquid Caustic Soda must meet the following product specifications:

Fifty percent (50%) Liquid Caustic Soda – Membrane Grade

<u>Property</u>		<u>Specification</u>
Sodium Hydroxide	(NaOH)	wt. % 49.0 min to 51.0 max
Alkalinity	(Na <sub>2</sub> O)	wt. % 38.0 min to 39.5 max
Sodium Carbonate	(Na <sub>2</sub> CO <sub>3</sub> )	wt. % 0.10 max
Sodium Chloride	(NaCl)	wt. % 0.006 max
Sodium Chlorate	(NaClO <sub>3</sub> )	wt. % 0.0015 max
Sodium Sulfate	(Na <sub>2</sub> SO <sub>4</sub> )	wt. % 0.005 max
Silica	(SiO <sub>2</sub> )	10 ppm max
Iron	(Fe)	3 ppm max

**7. AUTHORIZATION TO PERFORM WORK**

- 7.1 Liquid Caustic Soda provided in accordance with these Technical Specifications and Contract Documents shall be authorized **only** by the responsible JEA Contract Administrator, or his/her designee and a corresponding Purchase Order (PO).
- 7.2 Any products and/or services provided by the Supplier at the direction, direct or otherwise, of any other agency or personnel of JEA, other than the identified JEA Contract Administrator, may be considered as unauthorized and the Supplier may not be entitled to compensation for products and/or services performed in that circumstance.

**8. DELIVERY INSTRUCTIONS**

- 8.1 Delivery to each plant site shall be by tank truck. A certificate of weight, taken at the nearest certified weigh station to the JEA plant site, shall accompany each product shipment. As an alternative, there is a JEA Byproduct weigh station, located along the back entrance to NGS (off William Ostner Road), which may be utilized at the direction of the Contract Administrator.
- 8.2 JEA Northside Generating Station:
  - 1. Normal delivery is a full truck load.
  - 2. Delivery times are between 7am – 2pm, Monday through Friday, except Holidays defined in Section 2 of the Solicitation (unless Plant emergency dictates otherwise).
  - 3. Prior to deliveries, Supplier shall email to confirm scheduled delivery date & approximate time.
  - 4. Supplier must provide a minimum of thirty (30) minutes of notice before delivery by contacting (904) 665-7875.
  - 5. Delivery is required via the Northside Generating Station Rear Gate (4433 William Ostner Drive, Jacksonville, FL 32226).
  - 6. Two (2) hour turnaround on-site prior to any demurrage charges. Demurrage charges will only be paid if delays are directly caused by JEA actions.

**9. UNACCEPTABLE SERVICE**

- 9.1 In the event that any item purchased and delivered under the terms and conditions of this Solicitation is deemed unacceptable, at JEA’s sole discretion and for good and valid cause or any government agency which JEA is subject to, for reasons which are reasonably under the control of the Supplier, the Supplier shall re-accomplish that purchase and delivery, **completely at their own expense**, and in a timely manner.

**10. EMERGENCY CONTACT**

- 10.1 The Supplier shall provide name, address, email address, and telephone number (work, home, and cell) for those individual(s) who can be contacted in the event of an emergency.

**11. REPORTS**

- 11.1 Supplier shall submit semi-annual statements of usage to the JEA Contract Administrator. The report shall contain the following information for each order placed:

- A. JEA Department name
- B. Delivery location
- C. Type of Chemical
- D. Quantity
- E. Total Price
- F. Purchase Date

The report shall be sorted by department and totals identified for each department and for JEA as a whole.

## 12. PRICE

The Pricing Model provided below show the applicable indices and adjustment periodicity. Supplier may request an alternate market index for the price per ton portion of the unitized bid price, subject to JEA approval. The supplier shall submit at least two years of historical pricing data for alternate index and demonstrate the index acceptance by the energy industry.

BULK LIQUID CAUSTIC SODA - MEMBRANE GRADE							
Product Price Construction							
DELIVERY LOCATION	FIVE (5) YEAR ESTIMATED QUANTITY	UNIT OF MEASURE	I.H.S. Market price per Ton (1)	Freight Fee (2)	Distributor Fee (If Any)(3)	Total Price per Ton Delivred	Extended Price (ESTIMATED UNITS x COST / UNIT)
	A		B	C	D	=B+C+D	=A * (B+C+D)
JEA Northside Generating Station(NGS)	1,500	TONS (dry short)				\$ -	\$ -
% of AVERAGE TOTAL PRICE			#DIV/0!	#DIV/0!	#DIV/0!		
<b>5-YEAR TOTAL BID PRICE</b> (ENTER THIS AMOUNT ON THE RESPONSE FORM PAGE 1)							\$ -
Pricing shall be F.O.B. Destination, Freight Prepaid, to the above location							
<b>Price Adjustment Methodology</b>							
<p>(1) The <b>I.H.S. Market Price per Ton</b> shall remain fixed for the first quarter. Company may request a price adjustment at the beginning of each Quarter, based on the three (3) month moving average Price per ton published monthly by I.H.S. Note: I.H.S. Market price is the indication of the Distributor's Market Price Paid / ton. Company shall be responsible to provide substantiating documentation of IHS price adjustments. JEA may elect to independently verify price adjustments. Any increase greater than 5% in a Contract year, may require JEA to terminate the contract for convenience and rebid.</p>							
<p>(2) <b>Freight Fee</b>, shall be remain fixed for the First Year of the Contract. Company may request a price adjustment 30 days prior to the Contract Anniversary Date, if the Freight Index changes greater than 3% in the prior year. The Price adjustment shall be in accordance with the Bureau of Labor Statistics website for Series ID PCU4842--4842: Industry: Specialized Freight Trucking. (The current freight index information is provided on a separate tab in this workbook). Alternately Company may propose fuel surcharge chart in lieu of freight index for Freight Fee, subject to JEA Approval.</p>							
<p>(3) <b>Distributor Fee</b> if any shall be fixed for the life of the Contract.</p>							