



**REQUEST FOR PROPOSAL (RFP) NO. 18-008**

Water & Wastewater Treatment Chemicals

Cooperative Purchasing Specialist  
c/o Jayme Hardy

Email: [purchasing@mwkog.org](mailto:purchasing@mwkog.org)

**Proposers shall submit one (1) original and five (5) copies and one (1) CD or USB with the complete proposal to:**

Cooperative Purchasing Specialist  
c/o Jayme Hardy  
Metropolitan Washington  
Council of Governments  
777 North Capitol Street, NE, Suite 300  
Washington, DC 20002

**Submission Due Date: Tuesday, July 10, 2018**

**Time: 2:00 PM EDT**

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## I. INTRODUCTION

- A. In this procurement, the Metropolitan Washington Council of Governments (“COG”), acting as Lead Agency on behalf various water and wastewater treatment agencies (“Participating Agencies”), is soliciting competitive Proposals for products and/or services, which may be purchased by the Agencies during the contract term.
- B. This Request for Proposal (“RFP”) is to solicit Proposals for various types of **Water and Wastewater Treatment Chemicals** for Participating Agencies within the counties, cities and towns in the Metropolitan Washington region, including the District of Columbia, Virginia, and Maryland, for a period of one (1) year with four (4) options for a renewal period of one (1) additional year each.
- C. COG will help identify the most qualified, responsible and responsive Proposal(s) based on scoring criteria including price, qualifications and references.
- D. Contracts will be executed between the Participating Agencies and the winning Proposer(s). COG reserves the right to accept or reject any and all Proposals or portions thereof, to waive any informalities in the solicitation, and to recommend awards that appear to be in the best interest of the Participating Agencies.
- E. Qualified Proposers are requested to make submissions to the COG Cooperative Purchasing Specialist not later than **2:00 PM EDT on Tuesday, July 10, 2018**. At which time Proposals will be opened in the presence of witnesses.
- F. This RFP is open to all Agencies in the COG region and includes a Rider Clause (Attachment F) that allows those Agencies to use this procurement or the resulting contract to make purchases in accordance with their own policies.
- G. Proposers are requested not to contact the Participating Agencies directly. Proposers are requested to only contact COG in writing via email at [purchasing@mwkog.org](mailto:purchasing@mwkog.org) and cc: [jhardy@mwkog.org](mailto:jhardy@mwkog.org) with questions regarding this solicitation.

Full contact information is listed below:

Jayne Hardy  
Cooperative Purchasing Program Specialist  
777 North Capitol Street, NE, Suite 300  
Washington, DC 20002-4239  
Email [jhardy@mwkog.org](mailto:jhardy@mwkog.org)

## II. PROPOSAL INSTRUCTIONS

- A. Proposers must include the documentation specified below, and otherwise, in their RFP submission or they may be determined to be non-responsive and subject to

rejection. See also Proposal Checklist in Section VI. If this documentation has previously been supplied in response to a prior Request for Information, please check the appropriate box on the Proposal Checklist.

1. Proposer must have at least five (5) years of experience in the supply and delivery of chemicals to water and wastewater treatment facilities. Please complete attached PROPOSER QUALIFICATION FORM (Attachment A).
  2. Proposer shall complete the CONTACT INFORMATION FORM (Attachment B) in its entirety and designate a dedicated Sales/Customer Service Contact and Service/Support Contact as Key Personnel.
  3. Each Proposal shall be accompanied by a NON-COLLUSION AFFIDAVIT regarding price fixing, gratuities, bribery, and discriminatory employment practices. When the Proposer is a corporation, a duly authorized representative shall execute the affidavit (Attachment C).
  4. REFERENCES are to be provided from three (3) other clients who are being, or have been, provided by the Proposer with similar products, services and scope of work (Attachment D).
  5. All Proposals are to be submitted using the RFP REPLY LABEL on the outside of the solicitation package to identify the Proposal (Attachment E).
  6. Accord Form – PROOF OF INSURANCE must be provided as per the Terms and Conditions (Attachment G).
- B. All Proposals must be signed by responsible company officials and delivered in a sealed envelope no later than the time and date indicated herein. Proposals received after the time and date indicated will be returned unopened.
- C. Proposals will be scored based upon their ability to meet the specifications, pricing, organizational experience and organizational capacity (Section II.G).
- D. Multiple awards may be made for items covered by this RFP. Participating Agencies reserve the right to award the Proposal in its entirety, in segments or by individual item.
- E. SUBSTITUTIONS
1. Because of the distinct difference in quality and, more importantly, the cost of certain products, and when it has been determined that no other manner of description suffices, proprietary specification (brand names) have been used for some items.
  2. The use of brand names in no way precludes any Proposer from submitting alternative equivalent items for those items as long as the brand substitution

is clearly indicated and technical specifications (cut sheets) are provided which meet or exceed the requirements in the RFP Specifications.

F. CLARIFICATIONS VIA ADDENDA

1. Questions regarding discrepancies, omissions, specifications, Proposal instructions, or the Price Proposal Form (Table A) may be directed **in writing only** at least seven (7) business days before the Proposal opening, or **5:00 PM EDT, June 29, 2018** to Jayme Hardy, at [jhardy@mwkog.org](mailto:jhardy@mwkog.org).
2. Exceptions taken do not obligate COG to change the specifications. If no changes are needed, then no addendum will be issued.
3. COG will notify potential Proposers in writing, by addendum posted online, at least five (5) business days before the Proposal opening, or **Tuesday, July 3, 2018**, of any updated interpretations, specifications, or instructions.
4. It is the responsibility of the Proposer to check and see if addenda have been issued by COG, on its website, at [www.mwkog.org/purchasing-and-Proposals/cog-Proposals-and-RFPs/](http://www.mwkog.org/purchasing-and-Proposals/cog-Proposals-and-RFPs/)
5. Proposers should indicate that they have reviewed the latest addenda on the Price Proposal Form.

G. COG shall recommend the award of contract(s) to the Proposer(s) who has(ve) the highest score based on the criteria spelled out below.

It is the intent of each Participating Agency included in this RFP to award contract(s) on the basis of qualified Proposers providing the lowest Proposal prices received for each of their Proposal items, as well as, objective scoring of the Proposers' capacity, key personnel and past record of service.

Proposal Evaluation and Contractor Selection

1. Proposal submissions will be evaluated on the ability of the Proposer(s) to demonstrate the following:

<u>Evaluation Criteria</u>	<u>Weight</u>
a. Ability to meet Participating Agencies requirements including: <ol style="list-style-type: none"> <li>1) Delivery capability during the period of performance</li> <li>2) Ability to ensure security of supply</li> <li>3) Warranty, guarantee of product/service provision</li> </ol>	20%
b. Past Performances <ol style="list-style-type: none"> <li>1) Experience – company’s years of experience and experience of dedicated representatives (See Attachment B)</li> <li>2) References from three (3) other clients who are being or</li> </ol>	20%

have been provided by the Proposer comparable products and services (Attachment D)

3) Financial viability – Dunn & Bradstreet (D-U-N-S) number required on Attachment A.

c. Pricing 60%  
Proposer shall offer its most competitive rates to supply the chemicals specified in Section V.

2. COG and its Participating Agencies reserve the right to reject any proposals determined to be inadequate or unacceptable.
3. COG and its Participating Agencies may select more than one (1) bidder for each category of chemical. It is our intent to create a high level of supply chain security through the awards as a result of this RFP.

H. Proposers must acknowledge their understanding of the all terms and conditions listed in this RFP by signing the Proposal Qualification Form (Attachment A) and the Price Proposal Form (Table A) and include it with their submission.

I. COG, as Awarding Authority, reserves the right to cancel this RFP, or reject, in whole or in part, any or all Proposals within 60 days of the Proposal opening, if COG determines that cancellation or rejection serves the best interests of the Participating Agencies.

If additional time is needed to make an award, all Proposers will be notified.

J. Proposals are due at the designated time and date and should be submitted in the following formats:

1. In a sealed envelope with the Proposal Reply Label affixed to the outside, submit one (1) original and five (5) printed copies of the Proposal AND one (1) digital copy of the Proposal.
2. The digital copy can be one (1) CD or one (1) USB memory stick.

K. At any point during the award period, problems or concerns shall be addressed to COG at [purchasing@mwkog.org](mailto:purchasing@mwkog.org). As the administrator of the regional procurement program, COG shall be notified immediately of any problems that any Proposer has with the program or any problems that the Proposer experiences with any Participating Agency. COG will attempt to resolve the problem as quickly as possible.

### III. GENERAL CONDITIONS

- A. Because all orders will be on an “as needed” basis, Proposer must be familiar with the geographical proximity of the area for delivery purposes and be able to provide prompt customer service to Participating Agencies.
- B. Contact information for a Proposer’s customer service representative must be included on CONTACT INFORMATION FORM (Attachment B).
- C. Due to the importance of product quality and manufacturer support and certification, Proposers must demonstrate in the Proposal that they are a licensed distributor for products as appropriate.

#### D. PURCHASE AND DELIVERY TERMS

- 1. No minimum order quantity.
- 2. Successful Proposers shall accept orders via mail, facsimile, email, telephone and online web form from the Participating Agency if accompanied by a Purchase Order number or a P-card number. All orders shall be complete, labeled and packaged adequately to ensure safe handling and proper delivery.
- 3. No separate charges for freight and delivery.
- 4. Delivery will be to each Participating Agency as designated.
- 5. Sixty-four (64) hours (or less) turn-around is the preferred delivery time, unless otherwise specified in Section V. Proposer shall indicate any different delivery times.
- 6. Failure to meet delivery date and provide product as specified may result in written termination of the contract. Time is of the essence.
- 7. If the Participating Agency requests expedited delivery, the Proposer may pass those costs to the requesting Participating Agency only with prior written approval.
- 8. If the Proposer cannot meet the delivery requirement, either standard or expedited, each Participating Agency reserves the right to obtain the product from another source.

The extra cost of procuring the product may be charged to the Proposer and deducted from any monies due or which may become due from the Participating Agency.

- 9. Further, if the Proposer is unable to meet the delivery requirement and supply

the requested product within the designated time due to factory delay, strike, or any unforeseen circumstances, the Proposer must notify the ordering Participating Agency's representative of the delay and the anticipated delivery date.

Failure to comply with this requirement will result in a poor performance rating, which will be considered in subsequent awards or renewals, and could result in the termination of the contract.

10. Freight terms for all orders requested "delivered" shall be FOB destination Freight Prepaid. All delivery charges, fees, insurance, expenses, and/or overhead shall be included in the price.
11. No taxes shall be included in the price.
12. All Participating Agencies are responsible for inspecting all shipments and accepting them. Any damaged shipments shall be replaced solely at the Proposer's expense. This shall include pick-up of damaged product and delivery of replacement product. Replacement product shall be delivered within three (3) business days from receipt of notification of damage.
13. Delivery shall be during normal business hours, Monday through Friday, excluding holidays, unless otherwise specified in **Section V**. The Proposer shall be responsible for ensuring that deliveries are made during regular business hours for each Participating Agency.
14. A packing slip shall accompany all deliveries. The packing slip must include the Participating Agency's purchase order number. Any delivery that does not identify the appropriate Participating Agency's purchase order number could be rejected.

On the packing slip, the Proposer shall obtain a signature from a Participating Agency employee for all items delivered. The Proposer shall be required to furnish proof of delivery in case of dispute.

15. All "drop shipments" (direct from a manufacturer or wholesaler) must adhere to the terms specified within this solicitation.

#### E. PRICES/SHIPPING/BILLING

1. Prices
  - a. Unless stated otherwise below, all prices offered by Proposers shall be firm against any increase for one (1) year from the effective date of the contract.
  - b. **Methanol:** All prices offered herein shall be fixed for 180 days from effective date of the awarded contract. After this date, it shall be the Contractor's



responsibility to notify the Participating Agency 60 days in advance of any requested adjustment of price.

- i. Methanol price adjustments shall be based on the regional contract prices for North America, Europe and Asia, Methane Non-Discounted Reference Price for the period of June 1-31, 2018, plus the markup of the Contractor.
- ii. The Methanex Index is available at:

<https://www.methanex.com/our-business/pricing>

- c. For each subsequent year on the contract, the Contractor shall notify the Participating Agency at least 60 days prior to any increase taking effect and submit a request for a price increase by furnishing bona-fide manufacturer's documents or a price list reflecting the changes. Increases shall be limited to the actual cost increase to the Contractor.
- d. Price increase requests may be denied if not supported with appropriate price increase justification.
- e. Each Participating Agency reserves the right to accept or reject a price increase within 14 days of written request for a price increase. If the price increase is rejected, the order for the specific item will be canceled.
- f. If the price increase is approved, the price will remain firm for the renewal term for which it was requested. The Participating Agency will notify the Contractor in writing of the effective date of any price adjustment it has approved.
- g. Price Decreases: In the event of any decrease in price either by the manufacturer or if the Contractor charges a lower price to other customers, Contractor shall notify the Participating Agency and give the Participating Agency the decrease.

## 2. Shipping

- a. Price Proposals shall include all transportation and freight costs to the point of delivery at the applicable treatment or pumping facilities. If Proposer includes additional delivery costs, an explanation of such costs shall be included with **Section VI**. Price Proposal Form (Table A - separate Excel spreadsheet).
- b. Proposal prices shall also include all appurtenant and incidental costs associated with the chemical including all costs associated with the pickup, return, cleaning and/or proper disposal of chemical containers, fuel, special insurance, etc.

- c. Contractor shall be solely responsible for payment of freight costs with the carrier. Collect shipments *are* not acceptable and will be rejected.

### 3. Billing

- a. Contractor shall set up its billing system to ensure that no Participating Agency invoices include sales tax. Participating Agencies will provide certificates of exemption for sales tax upon request.
- b. To facilitate prompt payment, invoices must contain the commodity and/or service descriptions, quantity, and unit pricing.
- c. Invoices failing to contain the required line item detail, including contract line number and unit pricing may be returned for correction.
- d. **Proposers shall include a sample invoice with the response to this RFP.**

4. The Proposer shall assign a dedicated Service/Support Representative and provide their contact information for customer service and invoice issues. Include the name and contact information of the assigned representative in the Contact Information Form (Attachment B).

## F. PAYMENT

1. Payment to the Contractor shall be made within 30 days of receipt of an invoice covering deliveries made during the prior 30 days.
2. Participating Agencies reserve the right to hold payment or adjust payments for any products that do not meet the minimum specified or referenced standards.
3. Where the concentration of the chemical product is beyond the stipulated range of concentrations, the Participating Agency may reject the shipment.
4. Participating Agencies reserve the right to withhold or adjust payments if the Contractor fails to deliver chemical within the stipulated time, unless otherwise agreed to by the Participating Agency in advance.
5. The amount of the withholding will be based on the difference between the contract price and the price to have the order filled by others. If there is no difference in price, or if the price is less than the contract price, there will be no withholding of money.
6. If a Participating Agency chooses to accept a shipment of chemicals in concentrations greater than the specified concentrations, Contractor shall not be entitled to additional compensation above the Proposal price unless agreed

to in advance and in writing by the Participating Agency's Director of Procurement and/or the Chief of Operations (or their duly authorized representative).

7. If a Participating Agency chooses to accept a shipment of chemicals in a concentration less than the specified concentration, the unit price for the chemical shall be prorated linearly down based on the active ingredient concentration.

#### G. COOPERATIVE PURCHASE

1. COG, as an agent to the Participating Agencies, reserves the right to extend all of the terms, conditions, specifications, and unit or other prices of any contract resulting from this RFP to other public and non-profit agencies. This is conditioned upon mutual agreement based on the attached Rider Clause (Attachment F) of all parties pursuant to special requirements which may be appended thereto.
2. Contractor(s) agrees to notify COG of the Participating Agencies that desire to use any contract resulting from this RFP within 30 days of receiving said requests and to provide reporting as required per this RFP (**Section III.I**).
3. All contracts resulting from this RFP shall be with the individual Participating Agencies. COG assumes no authority, liability or obligation on behalf of any Participating Agency using a contract resulting from this RFP, or any Contractor, or any other entity with respect to this procurement or any contract resulting from it.
4. Participating Agencies may have other or additional terms and conditions that must be met by the Contractor.
5. All purchases and payment transactions will be made directly between the Contractor and the Participating Agency except where noted (see below **Section III.I.3**).

#### H. PARTICIPATION, SALES REPORTING, AND FEES

1. Contractor shall provide summary information on the purchases by Participating Agencies, through the purchasing program associated with this RFP, to COG on a semi-annual basis to allow COG to monitor the program's use and benefit to its members.

Semi-annual reporting Due Dates beginning 2018:

- November 30, covering May 1 – October 31
- May 31, covering November 1 – April 30

2. The semi-annual report will provide sales data broken down by item, quantity, unit cost and total for each individual Participating Agency within the timeframe laid out above. Contractor is responsible for establishing an accounting system or process that will enable the tracking and reporting of sales to Participating Agencies under this RFP.
3. The Proposal must include a 1% administrative fee paid to COG. The successful Proposer will be responsible for tracking and rebating this fee back to COG semi-annually based on gross sales for the periods described in **Section III.I.1** and due on November 30th and May 31st of each year on all contracts made pursuant to this RFP.

#### I. CONTRACT TERMS

1. Any resulting contract(s) shall be with the Participating Agencies and shall run for an initial term of one (1) year with options for up to an additional four (4) terms of one (1) year each.
2. There are no product substitutions without prior written approval.
3. COG will notify the Contractor(s) of the intention to extend the contract for an additional term of one (1) years at least 60 days prior to the end of the current contract.
4. Contractor shall notify all Participating Agencies of any price increases which shall take effect in the next year at least 60 days prior to the end of the contract year (pursuant to **Section III.F.1.c**).
5. Notification shall be in writing and shall identify the items, the new price, and the amount of increase specified as a percentage (%).
6. The award and resultant contract(s) shall be non-exclusive. Each Participating Agency shall determine its method of purchasing supplies from the contracted Proposer. This includes the right to obtain products from any other awarded Proposer(s) with lower prices and better overall service during the contract term.

#### II. TYPE OF CONTRACT

1. This is a requirements-type contract under which Participating Agencies, who agree, are obligated during the term of the contract to purchase their respective normal requirements of chemicals listed on the Price Proposal Form (Table A), and the Contractor is obligated to supply quantities of said chemicals that each Participating Agency requires in its operations.
2. If the Contractor fails to make delivery within the time stipulated, or

otherwise fails to honor the contract, the Participating Agency reserves the right to purchase the required chemicals from other sources to meet emergency needs without prejudice to the contract.

3. Any costs to the Participating Agency for purchasing chemicals from other sources above the contract unit price shall be the responsibility of the Contractor as stipulated in **Section III.D.8**.
4. Proposers are advised that the items on the Price Proposal Form (Table A) are the most commonly used and ordered items. No guarantee is made regarding specific quantities that may be ordered under any the contract, however, Proposers shall be required to honor its proposed price of any specified item.

#### K. PROCUREMENT CARD

1. The Participating Agency retains the option to use its agency procurement card for the purchase of supplies listed in any resulting contract in lieu of issuing a purchase order.
2. No procurement card transaction shall take place without the authorization of the cardholder and shall not exceed the limit placed on the cardholder's procurement card.
3. Contractor may process a payment in the credit card network ONLY upon shipment of supplies or performance of the services ordered by the Participating Agency.
4. For partial shipments or performance, Contractor may process a payment only for the amount shipped or completed and NOT for the entire amount ordered by the Participating Agency. Upon shipment or completion of the remaining order, Contractor may process a payment request to the credit card network for the remainder of the order.
5. Contractor may not charge the Participating Agency for any fees related to the use of a procurement card.
6. For all transactions, Contractor shall have a valid W-9 form on file with each Participating Agency.

#### IV. SPECIAL PROVISIONS

##### A. SCOPE

1. The Participating Agencies are on an as-required basis regarding product orders during the term of the contract. The chemical specifications and estimated annual quantities are listed in **Section V** and on the **Section VI** Price Proposal Form (Table A).

2. Participating Agencies have the right to opt out of this solicitation prior to a contract award.
3. Current non-Participating Agencies have the right to opt-in at a future date based on the Rider Clause (Attachment F).

#### B. QUANTITIES

1. Quantities stated herein are given as a general guide for Proposal purposes and are not guaranteed amounts. Actual requirements may vary by  $\pm 20$  percent more or less than the quantities indicated on the Price Proposal Form (Table A).
2. Additional quantities may be ordered during the term of the contract at the unit prices set forth in the contract. If at the end of the term of the contract, the Participating Agency has not placed orders for the total estimated quantities set forth in the contract, there shall be no penalty.
3. Minimum orders for bulk liquid and dry chemical supplied by tankers **must** be indicated by the Proposer. The minimum order is the smallest order that will be placed for a chemical delivered by tanker.

#### C. DELIVERY

1. Delivery shall be made to each facility as required on an "as-needed" basis. The Participating Agencies and their facilities' addresses are shown in the Specifications section (**Section V**).
2. Chemicals are sometimes used at multiple locations by a Participating Agency within a given plant. Where a chemical is used at more than one (1) location at a given facility, the delivery may be split between the two (2) or more processing areas at the Participating Agency's request without affecting the unit Proposal price.
3. Proposer shall provide a date and approximate delivery time for all scheduled deliveries in the Proposal. The Proposer shall provide advanced notification to the requesting Participating Agency of delivery delays, and any changes such as new/different sources of supply, chemical concentration, etc.
4. All delivery tickets shall include the net weight, volume and the percent concentration of the product as applicable.
5. All containers shall be clearly marked to indicate the contents and shall bear the current proper precautionary information required by the stipulated referenced standard, US Department of Transportation, US Environmental Protection Agency (US EPA), Virginia Department of Health (VDH), Department

of Environmental Quality (DEQ), and Maryland Department of the Environment (MDE) regulations, Virginia Department of Environment and other regulatory agencies concerned with the hazardous nature of the chemical being shipped. All chemicals that are National Sanitation Foundation (NSF) approved shall be so marked on the label.

6. Contractor is solely responsible for unloading all chemicals to the storage or usage locations at each plant. Contractor is also responsible for loading all empty and used chemical containers and pallets for return.
7. Containerized chemicals will not be accepted if the Contractor's delivery vehicle is not equipped with a properly functioning pallet jack and hydraulic lift/tail gate or if the Participating Agency determines or believes that the containers are unsafe.

#### D. CONTAINERS AND PALLETS

1. Proposers shall not be entitled to charge deposits on containers and pallets due to the accounting burden imposed on the Participating Agency to track deposits and refunds.

All containers and pallets shall be clearly marked with the name of the owners and an identifying serial number to uniquely distinguish the container or pallet.

2. The Contractor with each delivery of chemicals shall pick up empty containers and/or pallets. All costs associated with the pickup, return, cleanup, and/or proper disposal of the containers shall be included for each unit on the Price Proposal Form (Table A).
3. All chemical containers, valves, and appurtenances shall be safe and in good working order.
  - a. Valves for containerized gases shall be fully inspected by the Contractor for operability, mechanical integrity and safety before the container is filled and delivered.
  - b. If any Participating Agency determines that a valve, container or other appurtenant equipment is defective, unsafe or inoperable, the Contractor shall replace the container at no cost to the Participating Agency within 24 hours of notification by the Participating Agency.
  - c. Evidence of prior leakage, bent valve stems, hard to open valves, leaky packing, mismatched or unsecured valve covers, damaged piping threads, etc. are examples of some of the problems that will result in rejection of containerized chemicals by the awarding agencies.

## E. ADDITIONAL INFORMATION REQUIRED WITH PROPOSAL SUBMITTAL

1. All Proposals shall include Material Safety Data Sheets (MSDS), manufacturer specifications, and certificates of analysis for each chemical. Failure to submit MSDSs, specifications sheets, or certificates of analyses with the Proposal may disqualify the Proposal for *that* chemical.
2. The apparent best Proposer(s) for each chemical may be asked to submit data on the chemical manufacturers Quality Assurance and Quality Control measures to ensure a consistent quality of chemical. The data shall include statements regarding the sampling and analysis methods and statistical data (mean, standard deviation and population of the database thereof). This information, if requested, shall be furnished within seven (7) calendar days of the date of request. Failure to provide the information within the stipulated time may result in the rejection of the Proposal.

## F. GENERAL REQUIREMENTS

1. The specific requirements for bulk chemicals are summarized in the Chemical Specifications (**Section V**).
2. Where a referenced standard is listed, it shall mean the latest issue including all addenda as of the date of this advertisement.
3. Any chemical used in the processing of potable water must be listed in the NSF Listing for Drinking Water Additives, latest edition.
4. Changes in sources of supply for any chemical are subject to approval by each Participating Agency. Contractors must provide advanced notification and complete documentation of any proposed changes in the source/manufacturer of chemicals.
5. The quantities shown in the Proposal documents as "wet weight" are the solution weights of the chemicals. The Proposer shall consider the "wet weight" or actual delivery weight, including transportation/ freight costs.
6. There is no requirement for a Proposal bond or performance bond for this Proposal.



**V. CHEMICAL SPECIFICATIONS:**

**A. Overall Chemical Standards**

1. All chemicals must be in full compliance with NSF Standards 60 and 61 and/or latest version of Underwriters Laboratories, Inc. (UL). Evidence of NSF and UL certifications must be submitted with any offeror's proposal.
2. Must conform to all applicable American Water Works Association (AWWA) standard (latest version).
3. All chemicals must be in full compliance with applicable VDH, DEQ, and MDE regulations.
4. Chemicals shall not contain particles of sand, grit, coke, clay or gelatinous material in sizes that will clog metering pumps and appurtenances. Any debris that is found in the system that is attributable to a delivery not meeting chemical specifications or manufacturing issue shall be removed at the Contractor's expense.
5. Material Safety Data Sheets must be provided for each chemical.

**B. Chemical Specifications by Participating Agency**

**1. ALEXANDRIA RENEW ENTERPRISES (ALEXRENEW)**

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications			Unique Applicable Standards
004	Aluminum Sulfate	Tons	950	None			Must meet AWWA Standard B403 (or latest edition)
015	Calcium Nitrate Bioxide	Gallons	6,000	Product shall be EVOQUA			Must be delivered to AlexRew Four Mile Run Pump Station, 3650 Commonwealth Avenue, Alexandria, VA 22305. Station is unmanned and delivery driver will need to coordinate delivery schedule with AlexRenew staff.
017	Caustic Soda -50%	Tons	75	None			Must meet AWWA Standard B501 (or latest edition)
024	Ferric Chloride, Grade 2, Liquid	Tons	750	<ul style="list-style-type: none"> <li>• Drinking water grade</li> <li>• Must consist of between 37%-42% of Ferric Chloride (FeCl<sub>3</sub>) by weight</li> <li>• Specific Gravity must be between 1.390 – 1.480</li> <li>• Insoluble matter must be less than 0.2%</li> <li>• Must be high purity product manufactured by reacting chlorine gas with iron, HCl, ferrous sulfate, or ferrous chloride</li> <li>• Must not contain more than 1.0% free acid expressed as Hydrochloric Acid</li> </ul>			Must meet AWWA Standard B407 (or latest edition)
033	Methanol	Gallons	224,000	<b>PARAMETER</b>	<b>SPECIFICATION</b>	<b>METHOD</b>	Must supply 99.85% methanol that meets the specifications for methanol as stated in the most recent version of the International Methanol Producers and Consumers Association (IMPCA) Methanol Reference Specifications.
				Property	Grade AA Requirement		
				Acetone and aldehydes, Percent maximum	0.003		

RFP 18-008 WATER & WASTEWATER TREATMENT CHEMICALS

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038	Phosphoric Acid	Tons	Small Quantity		Must meet AWWA Standard B507-16 (or latest edition)																																										
044	Polymer, Emulsion (equal to SE-890 Clarifloc)	LBS	180,000	<ul style="list-style-type: none"> <li>• Polymer shall be bulk sacks (1,500 lbs per sack) of emulsion polymer used as a flocculent to optimize dewatering of wastewater sludge, equal to Clarifloc SE-890</li> <li>• Must have minimum shelf life of three (3) months for any sack</li> </ul>	All products shall be tested and qualified at the location of intended use. The product tested shall be the same as the product delivered; however, the requesting utility reserves the right to use a different product if tests show that a significant improvement in performance may be realized and the product will be supplied at the same bid price or less.																																										
051	Sodium Bisulfite	Gallons	Small Quantity	Must have product content of 38% liquid sodium bisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment	Must meet AWWA Standard B601 (or latest edition)																																										

## RFP 18-008 WATER & WASTEWATER TREATMENT CHEMICALS

062	Sodium Hypochlorite (Full)	Gallons	45,000	<ul style="list-style-type: none"> <li>• Product must consist of not less than 12.5% available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>• Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	Must meet AWWA Standard B300 (or latest edition)
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### AlexRenew Delivery Requirements:

- AlexRenew will schedule deliveries with Contractor for the month. However, in the event of an increase or decrease in chemical usage, AlexRenew reserves the right to cancel deliveries no less than one (1) business day in advance at no penalty. Additionally, if additional loads are required, Contractor shall deliver in three (3) calendar days after receipt of order.
- In order for AlexRenew to accept a bulk delivery, the following paperwork is required:
  - Certificate of Analysis (COA);
  - Bill of Lading; and
  - certified weight tickets.

AlexRenew is not responsible for any delay costs incurred by Contractor until proper paperwork is presented.

- AlexRenew will unload the bulk tanker within two (2) hours after connection to our unloading station. Because AlexRenew can only support offloading one (1) bulk truck at a time, Contractor is responsible for dispatching deliveries so that trucks do not have extensive wait time onsite.
- Contractor shall verify the driver ID and truck/tanker information at least twenty-four (24) hours prior to each delivery, by submitting verification information sheet via e-mail to the attention [Security.Guard@alexrenew.com](mailto:Security.Guard@alexrenew.com) and [Shiftleader@alexrenew.com](mailto:Shiftleader@alexrenew.com). Failure to meet this requirement will result in delivery rejection.
- Contractor shall verify delivery requirements according to location and provide all equipment to offload tanker.
- For deliveries by tanker truck, product delivery truck shall be capable of offloading to above ground chemical storage tank. Delivery truck shall provide all necessary equipment and means to offload, including air pressure. Contractor is responsible for matching receiving tank equipment with the proper tank truck discharge system. All hatches of product tanker are to be sealed and furnished with numbered seal tags. Tags are to be removed only in the presence of utility staff and provided to utility staff upon arrival and/or offloading.

### AlexRenew Delivery Locations:

Contractor shall verify delivery requirements according to the following location:

1800 Limerick Street  
Alexandria, VA 22314

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2. CITY OF BOWIE

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements
002	Aluminum Chlorhydrate (5/6 Basic) (Liquid)	LBS	6,000	<ul style="list-style-type: none"> <li>Liquid Aluminum/Chloride Ratio: Approximately 2.0-1.0</li> <li>Generalized Formula: A1 (OH) C1*(H O)</li> <li>Basicity: 5/6 or approximately 83%</li> <li>Aluminum Oxide Content: Approximately 23.5%</li> <li>Specific Gravity: Approximately 1.34</li> </ul>	Must meet AWWA Standard B408 (or latest edition)	Product must be shipped in approved returnable plastic drums. Product delivery truck shall be capable of offloading drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.
005	Aluminum Sulfate - Liquid	Gallons	28,000	None	Must meet AWWA Standard B403 (or latest edition)	The liquid alum shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
012	Calcium Hydroxide (Hydrated Lime)	Tons	190	None	Must meet AWWA Standard B202 (or latest edition)	The liquid calcium hydroxide shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
022	Chlorine, Liquid	LBS	20,000	None	Must meet AWWA Standard B301 (or latest edition)	Product must be shipped in approved cylinders (DOT 106A, 110A, or DOT 3AA480).
028	Hydrofluosalic Acid 23%-25%	Tons	10	<ul style="list-style-type: none"> <li>Product must consist of not less than 23% solution hydrofluosilicic acid, H<sub>2</sub>SiF<sub>6</sub>.</li> <li>Product shall not contain more than 0.020% "heavy metals" expressed as lead.</li> <li>Product shall be water white to straw yellow in color and free from suspended matter.</li> </ul>	Must meet AWWA Standard B703 (or latest edition)	Product delivery truck shall be capable of offloading 55-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.
043	Polymer	LBS	20,000	<ul style="list-style-type: none"> <li>Polymer shall be a high cationic type liquid emulsion used as a flocculent for the purpose of optimizing dewatering of wastewater sludge.</li> <li>The polymer shall be in liquid form having a minimum shelf life of three (3) months for any unopened tote bins and shall meet the following minimum performance requirements:                             <ul style="list-style-type: none"> <li>Percent Free Solids: 1% to 1.5%</li> <li>Cake, percent dry solids: 18% minimum</li> </ul> </li> </ul>	All products shall be tested and qualified at the location of intended use. The product tested shall be the same as the product delivered; however, the requesting utility reserves the right to use a different product if tests show that a significant improvement in performance may be realized and the product will be supplied at the same bid price or less.	Polymer Solution will be delivered as liquid in non-ferrous 275-gallon tote bins. Product delivery truck shall be capable of offloading totes and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.

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				<ul style="list-style-type: none"> <li>• Capture, percentage: 95% – 98 %</li> <li>• Minimum &amp; maximum feed rates: 65 gallons per minute (gpm) to 150 gpm</li> <li>• Maximum Polymer dosage: 30 pounds/ dry ton</li> </ul>		
055	Sodium Carbonate (Soda Ash)	50-pound bags	730	<ul style="list-style-type: none"> <li>• Product shall have a Bulk Density of 0.7 – 0.9 g/l</li> <li>• Product shall be a Free Flowing, finely powdered grade.</li> <li>• Contractor shall provide a current product analysis indicating % NaCO and NaO, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.</li> <li>• Product must contain Sodium Carbonate (NaCO) of not less than 99%, of which not less than 58% shall be in the form of Sodium Oxide (NaO).</li> <li>• Product shall not contain insoluble matter exceeding 0.05%</li> <li>• Product shall not contain large lumps, crystals, chips, or other foreign matter. Product deemed unacceptable by Owner due to poor quality, such as clumping or a failure to homogeneously dissolve in solution that will clog metering pumps and appurtenances will be rejected.</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA specification B201 - 08 (or latest edition)</li> <li>• Must meet USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>• Bagged Sodium Carbonate (Soda Ash) weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>• Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
067	TR-6 Precipitant	Gallons	3,000	<ul style="list-style-type: none"> <li>• Corrosive liquid caustic metal precipitant</li> <li>• Appearance: red color</li> <li>• Slight odor</li> <li>• Specific Gravity: 1.090 – 1.150</li> </ul>	<ul style="list-style-type: none"> <li>• Must be transported in compliance with Annex II of Marpol 73/78</li> <li>• Must meet USEPA Primary Drinking Water Standards</li> </ul>	Deliveries must be made within three (3) calendar days of order being placed.

City of Bowie Delivery Location:

Deliveries shall be made to City of Bowie Water and Wastewater Treatment Plant, 16550 Annapolis Road, Bowie, MD 20715 between 7:00 AM and 2:00 PM EDT, Monday through Friday.

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3. CITY OF FREDERICK

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements
001	Aluminum Chlorhydrate (5/6 Basic - Liquid)	55-gallon Drums	60	<ul style="list-style-type: none"> <li>Liquid Aluminum/Chloride Ratio: Approximately 2.0-1.0</li> <li>Generalized Formula: <math>A1(OH)C1*(H O)</math></li> <li>Basicity: 5/6 or approximately 83%</li> <li>Aluminum Oxide Content: Approximately 23.5%</li> <li>Specific Gravity: Approximately 1.34</li> </ul>	Must meet AWWA Standard B408 (or latest edition)	Product must be shipped in approved returnable plastic drums. Product delivery truck shall be capable of offloading drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.
004	Aluminum Sulfate	Tons	408 (as dry weight)	None	Must meet AWWA Standard B403 (or latest edition)	The liquid aluminum sulfate shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
012	Calcium Hydroxide (Hydrated Lime)	Tons	9,000	None	Must meet AWWA Standard B202 (or latest edition)	The liquid calcium hydroxide shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
018	Caustic Soda 25% (Sodium Hydroxide Solution)	Gallons	60,000	<ul style="list-style-type: none"> <li>Product must consist of not less than 25% solution anhydrous sodium hydroxide, NaOH.</li> <li>Specific gravity shall be 1.278 at 60° F.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B501 (or latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	Product delivery tanker shall be capable of offloading to above ground chemical storage tank. Delivery tanker shall provide all necessary equipment and means to offload, including air pressure.
020	Chlorine, 1 Ton Containers	Tons	60	None	Must meet AWWA Standard B301 (or latest edition)	Product must be shipped in approved cylinders (DOT 106A, 110A, or DOT 3AA480).
021	Chlorine, 105 #	Cylinders	300	None	Must meet AWWA Standard B301 (or latest edition)	Product must be shipped in approved cylinders (DOT 106A, 110A, or DOT 3AA480).
025	Ferric Chloride, Water 37%-42%	Tons	4,000-30,000	<ul style="list-style-type: none"> <li>Drinking water grade</li> <li>Product must consist of between 37%-42% of Ferric Chloride (<math>FeCl_3</math>) by weight</li> <li>Specific Gravity must be between 1.390 – 1.480</li> <li>Insoluble matter must be less than 0.2%</li> <li>Must be high purity product manufactured by reacting chlorine gas with iron, HCl, ferrous sulfate, or ferrous chloride</li> </ul> <p>Must not contain more than 1.0% free acid expressed as Hydrochloric Acid</p>	Must meet AWWA Standard B407 (or latest edition)	Contractor shall provide Certificate of Analysis (COA) with each delivery reflecting product manufacturing process and location. COA shall also include Specific Gravity, % FeCl, % HCl and % solution.

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026	Ferric Sulfate, Liquid (Approx. 40% to 50% by weight of the dry-form ferric sulfate)	Wet Tons	120 (Seasonal Use Anticipated – Warm Months)	<ul style="list-style-type: none"> <li>Water-soluble ferrous iron (Fe<sup>2+</sup>) shall not exceed 0.15%, in liquid ferric sulfate.</li> <li>Water insoluble matter shall not be more than 0.1% and shall be insoluble in liquid ferric sulfate.</li> <li>Liquid ferric sulfate shall contain sufficient acid as H<sub>2</sub>SO<sub>4</sub> so solution pH is 2 or less to ensure product stability. Percent H<sub>2</sub>SO<sub>4</sub> shall not exceed 0.25%. Liquid ferric sulfate shall contain not less than 12.8% and not more than 14% water-soluble ferric iron (Fe<sup>3+</sup>). No additional payment will be made for any shipment of ferric sulfate that exceeds the 12.8% minimum.</li> <li>Liquid ferric sulfate shall not be a by-product from any other process or be manufactured using materials that are either by-products or waste products. Liquid Ferric Sulfate shall be manufactured from a source of virgin mined ore and selected high purity components, i.e., magnetite, hematite, and a "water white" grade of sulfuric acid. Ferric sulfate shall not contain specific impurities in excess of the following limit (by weight), for an expected maximum dosage not exceeding 100 mg/L based on ferric sulfate content. The Water Chemicals Codex should be consulted if alternative impurity limits are to be considered based on varying dosage levels.</li> </ul> <table border="1" data-bbox="737 670 1402 1040"> <tr><td>Arsenic 1.0 mg/kg</td><td>Copper 5.0 mg/kg</td></tr> <tr><td>Cadmium 0.5 mg/kg</td><td>Zinc 10.0 mg/kg</td></tr> <tr><td>Chromium 5.0 mg/kg</td><td>Manganese 100.0 mg/kg</td></tr> <tr><td>Lead 1.0 mg/kg</td><td>6.0 mg/kg</td></tr> <tr><td>Mercury 0.2 mg/kg</td><td>Chloride 100.0 mg/kg</td></tr> <tr><td>Selenium 3.0 mg/kg</td><td>Fluoride 60.0 mg/kg</td></tr> <tr><td>Silver 11.0 mg/kg</td><td>Titanium 75.0 mg/kg</td></tr> <tr><td>Nitrites (AS N) 75.0 mg/kg</td><td>Sodium 1000.0 mg/kg</td></tr> <tr><td>Total Organic Carbon 15.0 mg/kg</td><td>Molybdenum 15.0 mg/kg</td></tr> <tr><td>Nickel 40.0 mg/kg</td><td>Antimony 1.0 mg/kg</td></tr> <tr><td>Beryllium 1.0 mg/kg</td><td>Cyanide 1.0 mg/kg</td></tr> <tr><td>Thallium 10.0 mg/k</td><td>Total Nitrate an Nitrite (AS N) 150 mg/kg</td></tr> </table>	Arsenic 1.0 mg/kg	Copper 5.0 mg/kg	Cadmium 0.5 mg/kg	Zinc 10.0 mg/kg	Chromium 5.0 mg/kg	Manganese 100.0 mg/kg	Lead 1.0 mg/kg	6.0 mg/kg	Mercury 0.2 mg/kg	Chloride 100.0 mg/kg	Selenium 3.0 mg/kg	Fluoride 60.0 mg/kg	Silver 11.0 mg/kg	Titanium 75.0 mg/kg	Nitrites (AS N) 75.0 mg/kg	Sodium 1000.0 mg/kg	Total Organic Carbon 15.0 mg/kg	Molybdenum 15.0 mg/kg	Nickel 40.0 mg/kg	Antimony 1.0 mg/kg	Beryllium 1.0 mg/kg	Cyanide 1.0 mg/kg	Thallium 10.0 mg/k	Total Nitrate an Nitrite (AS N) 150 mg/kg	Must meet AWWA Standard B406 (or latest edition)	The liquid ferric sulfate shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Tank trucks shall be equipped with a self-pressurized pneumatic system and adequate hoses of proper size to connect to City facilities. Tank trucks shall be in suitable condition for hauling liquid ferric sulfate and shall not contain any substances that might affect the use or usefulness of the liquid ferric sulfate in treating water.
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029	Hydrofluosilicic Acid (25%)	30-gallon Drums	330	<ul style="list-style-type: none"> <li>Product must consist of not less than 23% solution hydrofluosilicic acid, H<sub>2</sub>SiF<sub>6</sub>.</li> <li>Product shall not contain more than 0.020% "heavy metals" expressed as lead.</li> <li>Product shall be water white to straw yellow in color and free from suspended matter.</li> </ul>	Must meet AWWA Standard B703 (or latest edition)	Product delivery truck shall be capable of offloading 55-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.																								
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048	Powder Activated Carbon	Tons	2,200	<ul style="list-style-type: none"> <li>Product shall be finely powdered grade: sieve sizing as follows not less than: <ul style="list-style-type: none"> <li>99% passing a 100-mesh sieve</li> <li>95% passing a 200-mesh sieve</li> <li>90% passing a 325-mesh sieve</li> </ul> </li> <li>Each respective bidder shall provide quantitative results demonstrating effective removal of Geosmin and MIB. The test results should include: Particle Sizing, Apparent Density, Hardness, Ash, Iodine and Tannin values. The product shall meet the following parameters: <ul style="list-style-type: none"> <li>Iodine Number = 500 mg/g Min</li> <li>Tannin Value = 125 – 150 mg/L</li> <li>Apparent Density = 0.30 – 0.50 gms/ml.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA standard B-600-96 or latest version</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Bagged carbon weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>																																							
062	Sodium Hypochlorite (Full)	Gallons	25	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% available chlorine with</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA</li> </ul>	Product delivery tanker shall be capable of offloading 55-gallon drums																																							



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				<p>approximately 0.3% to 0.85% excess NaOH for stability control.</p> <ul style="list-style-type: none"> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<p>Standard B300 (or latest version)</p> <ul style="list-style-type: none"> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<p>or 237- gallon totes to the ground with hydraulic gate or other mechanism. Delivery tanker shall provide all necessary equipment and means to offload, including drum dolly or jack.</p>
063	Sodium Hypochlorite (Short)	Gallons	6,000	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (or latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<p>Product delivery tanker shall be capable of offloading gallon drums or gallon totes to the ground with hydraulic gate or other mechanism. Delivery tanker shall provide all necessary equipment and means to offload, including drum dolly or jack.</p>
068	Zinc Orthophosphate (Liquid)	30-gallon Drums	200	<ul style="list-style-type: none"> <li>Product must have a phosphate/zinc ratio of 1:1</li> <li>Product shall be completely water soluble, have a pH of about 1.29, and a specific gravity of 1.265.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B506 (or latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<p>Product delivery truck shall be capable of offloading 30-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</p>

City of Frederick Delivery Locations:

Contractor shall verify delivery requirements according to each of the following locations:

Linganore Water Treatment Plant  
6436 Plant Road  
Frederick, MD 21701

Monocacy Water Treatment Plant  
1950 North Market Street  
Frederick, MD 21701

L.R. Dingle Filtration Plant  
5111 Christopher Crossing  
Frederick, MD 21701

Fishing Creek Reservoir  
5733 Mountaindale Road  
Thurmont, MD 21788

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4. FREDERICK COUNTY

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements
009	Bio Neutralizer Tablets (Dechlor) 2-5/8"	LBS	3,000	<ul style="list-style-type: none"> <li>a. A blended sodium sulfite tablet for removal of chlorine in wastewater and non-potable water.</li> <li>b. Active Ingredient – Sodium Sulfite (NaSO<sub>3</sub>)</li> <li>c. Inert Ingredients – 65%</li> <li>d. Boiling Point at 76 mm Hg decomposes at 900 degrees C</li> <li>e. Solubility 1-1; % by weight 25% degrees at 90 degrees C</li> <li>f. Specific Gravity – 2.63</li> <li>g. Approximately Tablet Density – 125 lbs/ft<sup>3</sup></li> </ul>	None	<ul style="list-style-type: none"> <li>• Product shall be shipped palletized in 40-45 lb. bags. Each bag shall be marked legibly with product name and weight.</li> <li>• Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
011	Calcium Hypochlorite	LBS	100	<ul style="list-style-type: none"> <li>• Dry Chlorine</li> <li>• Type HYH Granular</li> <li>• 65% available chlorine</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B300 (or latest edition)</li> <li>• Must meet US EPA Primary Drinking Water Standards</li> </ul>	<p>Product must be shipped in 100 lb. non-returnable containers.</p> <p>Product delivery truck shall be capable of offloading containers to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other handling device.</p>
013	Calcium Hydroxide (Hydrated Lime)	LBS	150	<ul style="list-style-type: none"> <li>• Aqueous solution of Calcium Hydroxide</li> </ul>	Must meet AWWA Standard B202 (or latest edition)	Product delivery truck shall be capable of offloading 50-lb bags to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.
017	Caustic Soda – 50%	Tons	180	None	Must meet AWWA Standard B501 (latest edition)	The liquid caustic soda shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
020	Chlorine, 1 Ton Containers	Tons	32	None	Must meet AWWA Standard B301 (or latest edition)	Product must be shipped in approved cylinders (DOT 106A,

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						110A, or DOT 3AA480).															
023	Citric Acid, 50%	Gallons	23,000	Aqueous solution of Citric Acid (50%)	<ul style="list-style-type: none"> <li>• Must meet VDH regulations.</li> <li>• Must meet US EPA Primary Drinking Water Standards (Drinking Water Grade)</li> </ul>	Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.															
025	Ferric Chloride, Water 37% - 42%	Tons	828	<ul style="list-style-type: none"> <li>• Drinking water grade</li> <li>• Product must consist of between 37%-42% of Ferric Chloride (FeCl<sub>3</sub>) by weight</li> <li>• Specific Gravity must be between 1.390 – 1.480</li> <li>• Insoluble matter must be less than 0.2%</li> <li>• Must be high purity product manufactured by reacting chlorine gas with iron, HCl, ferrous sulfate, or ferrous chloride</li> </ul> Must not contain more than 1.0% free acid expressed as Hydrochloric Acid	Must meet AWWA Standard B407 (or latest edition)	<ul style="list-style-type: none"> <li>• Contractor shall provide Certificate of Analysis (COA) with each delivery reflecting product manufacturing process and location. COA shall also include Specific Gravity, % FeCl, % HCl and % solution.</li> <li>• Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>															
029	Hydrofluosilicic Acid (25%)	30-gallon Drums	5	<ul style="list-style-type: none"> <li>• Product must consist of not less than 23% solution hydrofluosilicic acid, H<sub>2</sub>SiF<sub>6</sub>.</li> <li>• Product shall not contain more than 0.020% "heavy metals" expressed as lead.</li> <li>• Product shall be water white to straw yellow in color and free from suspended matter.</li> </ul>	Must meet AWWA Standard B703 (or latest edition)	<ul style="list-style-type: none"> <li>• Product delivery truck shall be capable of offloading 15-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>															
030	Hydrofluosilicic Acid (25%), Bulk	Tons	6,600	<ul style="list-style-type: none"> <li>• Product must consist of not less than 23% solution hydrofluosilicic acid, H<sub>2</sub>SiF<sub>6</sub>.</li> <li>• Product shall not contain more than 0.020% "heavy metals" expressed as lead.</li> <li>• Product shall be water white to straw yellow in color and free from suspended matter.</li> </ul>	Must meet AWWA Standard B703 (or latest edition)	<ul style="list-style-type: none"> <li>• Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>															
033	Methanol	Gallons	260,000	<table border="1"> <thead> <tr> <th>PARAMETER</th> <th>SPECIFICATION</th> <th>METHOD</th> </tr> </thead> <tbody> <tr> <td>Property</td> <td>Grade AA Requirement</td> <td></td> </tr> <tr> <td>Acetone and aldehydes, Percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Acetone, percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Ethanol, percent maximum</td> <td>0.001</td> <td>IMPCA 001-98</td> </tr> </tbody> </table>	PARAMETER	SPECIFICATION	METHOD	Property	Grade AA Requirement		Acetone and aldehydes, Percent maximum	0.003		Acetone, percent maximum	0.003		Ethanol, percent maximum	0.001	IMPCA 001-98	Must supply 99.85% methanol that meets the specifications for methanol as stated in the most recent version of the International Methanol Producers and Consumers Association (IMPCA) Methanol Reference Specifications	<ul style="list-style-type: none"> <li>• Methanol delivery trucks must be equipped with vapor recovery system compatible with utility equipment.</li> <li>• Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>
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034	Micro-C Glycerin	Gallons	250,000	<p>Chemical/Physical properties:</p> <ul style="list-style-type: none"> <li>• Glycerin 70% (+-1%)</li> <li>• Water 26% (+-3%)</li> <li>• Sodium chloride 4.75% (+-1.75%)</li> <li>• Fatty Acids 0.05-0.6%</li> </ul> <p>Methyl alcohol 0-0.06%</p>	None	Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.																																				
042	Polyaluminum Chloride 12% (Delpac2500)	Gallons	130,000	None	None	Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.																																				
047	Potassium Permanganate (Pails)	Tons	29	<ul style="list-style-type: none"> <li>• Contractor shall provide a current product analysis indicating %KMnO4, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.</li> <li>• Product must contain KMnO4 of not less than 97%.</li> <li>• No more than 7% by weight of the free-flowing grade shall pass through</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B603 (latest edition)</li> <li>• Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>• Pails shall be ICC approved non-returnable high-density polyethylene with full open tops, weighing approximately 55 pounds and shall be NSF</li> </ul>																																				

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				<p>a U.S. Standard Series No. 200 sieve, and no more than 20% by weight may be retained on a U.S. Standard Series No. 40 sieve.</p> <ul style="list-style-type: none"> <li>• Bulk density shall be approximately 100 pounds per cubic foot, and shall be relatively dust free in handling.</li> <li>• Specific gravity equal to 1.039 of a 6% solution by weight, at 68°F.</li> <li>• Product shall be stable in storage for at least three (3) years.</li> </ul>		<p>approved. Pails shall be pallet stacked and shrink wrapped for handling.</p> <ul style="list-style-type: none"> <li>• Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>
048	Powder Activated Carbon	Tons	43	<ul style="list-style-type: none"> <li>• Product shall be finely powdered grade: sieve sizing as follows not less than: <ul style="list-style-type: none"> <li>• 99% passing a 100-mesh sieve</li> <li>• 95% passing a 200-mesh sieve</li> <li>• 90% passing a 325-mesh sieve</li> </ul> </li> <li>• Each respective bidder shall provide quantitative results demonstrating effective removal of Geosmin and MIB. The test results should include: Particle Sizing, Apparent Density, Hardness, Ash, Iodine and Tannin values. The product shall meet the following parameters. <ul style="list-style-type: none"> <li>• Iodine Number = 500 mg/g Min</li> <li>• Tannin Value = 125 – 150 mg/L</li> <li>• Apparent Density = 0.30 – 0.50 gms/ml.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA standard B-600 (latest version)</li> <li>• Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>• Bagged carbon weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>• Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
052	Sodium Bisulfite 40%	55-gallon Drums	10	<p>Must have product content of 40% liquid sodium bisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment</p>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B601 (or latest edition)</li> <li>• Must meet US EPA Primary Drinking Water Standards</li> </ul>	<p>Product shall be shipped in 55-gallon drum.</p>
055	Sodium Carbonate (Soda Ash)	50-pound Bags	40	<ul style="list-style-type: none"> <li>• Product shall have a Bulk Density of 0.7 – 0.9 g/l</li> <li>• Product shall be a Free Flowing, finely powdered grade.</li> <li>• Contractor shall provide a current product analysis indicating % NaCO and NaO, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.</li> <li>• Product must contain Sodium Carbonate (NaCO) of not less than 99%, of which not less than 58% shall be in the form of Sodium Oxide (NaO).</li> <li>• Product shall not contain insoluble matter exceeding 0.05%</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA specification B201 - 08 (or latest edition)</li> <li>• Must meet USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>• Bagged Sodium Carbonate (Soda Ash) weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>• Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
056	Sodium Chloride (NaCl)	LBS	3,000	None	Must meet AWWA Standard	<ul style="list-style-type: none"> <li>• Product shall be shipped</li> </ul>

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					B200-78 (or latest edition)	palletized in 40 lb. bags. Each bag shall be marked legibly with product name and weight. <ul style="list-style-type: none"> <li>Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
061	Sodium Hypochlorite (15%)	5-gallon Totes	1,100	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (or latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	Product delivery truck shall be capable of offloading 5-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.
062	Sodium Hypochlorite (Full)	Gallons	65,000	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (or latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.
066	Sulfuric Acid, 93%	Gallons	2,900	<ul style="list-style-type: none"> <li>Product must consist of 93% sulfuric acid (H2SO4)</li> <li>Product shall be 66° Baume.</li> </ul>	Must meet US EPA Primary Drinking Water Standards (Drinking Water Grade)	Product delivery truck shall be capable of offloading and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.
069	Zinc Orthophosphate (Liquid)	55-gallon Drums	30	<ul style="list-style-type: none"> <li>Product must have a phosphate/zinc ratio of 1:1</li> <li>Product shall be completely water soluble, have a pH of about 1.29, and a specific gravity of 1.265.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B506 (or latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Product delivery truck shall be capable of offloading 55-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>

Frederick County Delivery Locations

Contractor shall verify delivery requirements according to each of the following locations:

Ballenger Creek WWTP  
7400 Marcie's Choice Lane  
Frederick, MD 21704

New Design WTP  
850 New Design Road  
Frederick, MD 21704

Landfill Leachate Facility  
9031 Reich's Ford Road  
Frederick, MD 21704

5. FORT DETRICK

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements
003	Aluminum Chlorohydrate CES PACL 2000 (50% solution of aluminum chlorohydrate)	LBS (3000 lbs per weekly delivery)	174,000	<ul style="list-style-type: none"> <li>Liquid Aluminum/Chloride Ratio: Approximately 2.0-1.0</li> <li>Generalized Formula: A1 (OH) C1*(H O)</li> <li>Basicity: 5/6 or approximately 83%</li> <li>Aluminum Oxide Content: Approximately 23.5%</li> <li>Specific Gravity: Approximately 1.34</li> </ul>	Must meet AWWA Standard B408 (or latest edition)	<ul style="list-style-type: none"> <li>Product must be shipped to 1780 North Market St Ext, Frederick, MD 21702</li> <li>Product must be shipped in approved returnable plastic drums. Product delivery truck shall be capable of offloading drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>
027	Grease-B-Gone	5-gallon buckets	175	None	None	Product must be shipped to Fort Detrick Maryland Buildings #190, #393 and #9250, Frederick, MD 21702
034	Micro-C Glycerin	Gallons	26,100 (237-gallon totes weekly)	Chemical/Physical properties: <ul style="list-style-type: none"> <li>Glycerin 70% (+-1%)</li> <li>Water 26% (+-3%)</li> <li>Sodium chloride 4.75% (+-1.75%)</li> <li>Fatty Acids 0.05-0.6%</li> <li>Methyl alcohol 0-0.06%</li> </ul>		<ul style="list-style-type: none"> <li>Product must be shipped to 1780 North Market St Ext, Frederick, MD 21702</li> <li>Product delivery truck shall be capable of offloading 237-gallon totes and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>
039	Pit Raider	55-gallon Buckets (monthly)	12	None	None	Product must be shipped to Fort Detrick Building 101 Pumping Station. Frederick, MD 21702
045	Liquid Polymer - ZETAG 7878FS40 (winter blend)	Drums (1 drum per delivery; Bi-weekly, November through April)	15	<ul style="list-style-type: none"> <li>Polymer shall be 200 Kg drums of Liquid Grade Cationic Polyelectrolyte (equal to ZETAG 7878FS40 – winter blend). Liquid polymer is made up of the following:                             <ul style="list-style-type: none"> <li>Adipic acid 0-2.0%</li> <li>Distillates (petroleum) hydrotreated light 0-5.0%</li> <li>Distillates (petroleum) hydrotreated heavy naphthenic 30.0-36.0%</li> <li>Alcohols, C12-16, ethoxylated 0-2.0%</li> <li>Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide 48.0-52.0%</li> <li>Alcohols, C11-14-iso,C13-rich, ethoxylated propoxylated 0-6.0%</li> <li>Alcohols C10-16, ethoxylated 0-2.0%</li> <li>Poly(oxy-1,2-ethanediy), .alpha.-nonylphenyl)-.omega.-hydroxy-, branched</li> </ul> </li> </ul>	None	<ul style="list-style-type: none"> <li>Product must be shipped to 1780 North Market St Ext, Frederick, MD 21702</li> <li>Product delivery truck shall be capable of offloading 200 Kg drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>



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046	Liquid Polymer - ZETAG 8844FS (summer blend)	Drums (1 drum per delivery; Bi-weekly, May through October)	14	<ul style="list-style-type: none"> <li>The polymer shall have a minimum shelf life of three (3) months.</li> <li>Polymer shall be 200 Kg drums of Liquid Grade Cationic Polyelectrolyte (equal to ZETAG 8844FS – summer blend). Liquid polymer is made up of the following:                             <ul style="list-style-type: none"> <li>Distillates (petroleum) Hydrotreated light 20-30%,</li> <li>Ethanaminium N N N-trimethyl-2-(1-oxo-2 propenyl) oxy-chloride polymer with 2-propenamide 15-40%,</li> <li>Alcohols C11-15-secondary ethoxylated 1.0-5.0%</li> </ul> </li> <li>The polymer shall have a minimum shelf life of three (3) months.</li> </ul>	None	<ul style="list-style-type: none"> <li>Product must be shipped to 1780 North Market St Ext, Frederick, MD 21702</li> <li>Product delivery truck shall be capable of offloading 200 Kg drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>
059	Sodium Hypochlorite	237-gallon totes (quarterly)	4	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	Must meet AWWA Standard B300 (or latest edition)	<ul style="list-style-type: none"> <li>Product must be shipped to 1780 North Market St Ext, Frederick, MD 21702</li> <li>Product delivery truck shall be capable of offloading 237-gallon totes to the ground with hydraulic gate or other mechanism. Product delivery truck shall be capable of offloading totes and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>

### Fort Detrick Chemical Requirements

#### Contractor must:

- Perform regular inspections to ensure product is being used in accordance with manufacturer’s recommendations.
- Test chemicals and equipment, used by plant personnel to perform daily chemical concentration test, if necessary.
- Provide on-site tanks to properly maintain (including secondary containment) and dispense chemicals for daily usage if needed.
- Provide all labor, supervision, transportation and tools for transferring and handling chemicals, such as pumps and smaller daily use containers.
- Provide and maintain three (3) – 850 gallon holding tanks to hold bulk chemicals.
- Provide and maintain wireless electronic level sensors at the 850 gallon holding tanks.
- Be able to deliver chemicals within a 12-hour window after phone call.
- Be within a 3-hour driving radius of Fort Detrick’s Wastewater Treatment Plant and be able to provide deliveries on a scheduled weekly basis.
- Be able to provide onsite technical support in regard to the provided chemical within a 12-hour window of receiving support request.
- Chemicals and delivery systems must be able to integrate with existing systems without requiring the shutdown of the plant in order to introduce a new or equivalent chemical.

### Fort Detrick Delivery Requirements:

Contractor shall follow the security and access protocols as directed by Fort Detrick. At a minimum, the Contractor's delivery driver must:

- Be a U.S. Citizen or registered legal alien
- Contractor may be required to execute non-disclosure agreement.

Fort Detrick Delivery Locations

Contractor shall verify delivery requirements according to each of the following locations. Deliveries shall be made between 7:30 AM and 3:30 PM EDT, Monday through Friday:

375 Beasley Drive  
Fort Detrick

Building 190 – Boiler Plant  
Building 393 – Incinerator Plant  
Building 1673 – Power Plant  
Building 9250 Warehouse – Cooling Tower & Boiler  
Building 1507 – Indoor Pool

Building 841 – Outdoor Pool  
Building 1162 – Water Treatment Plant  
Building 693 – Cooling Tower Water Treatment  
Building 101 – Pumping Station

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6. TOWN OF LEESBURG (LEESBURG)

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements															
017	Caustic Soda - 50%	Tons	192	None	Must meet AWWA Standard B501 (latest edition)	The liquid caustic soda shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Approximate delivery amount 4,000 gallons.															
019	Caustic Soda – 25%	Dry Tons	170	<ul style="list-style-type: none"> <li>Not less than 25% solution anhydrous sodium hydroxide, NaOH</li> <li>Specific Gravity shall be 1.278 at 6° degrees F</li> </ul>	Must meet AWWA Standard B501 latest edition	The liquid caustic soda shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Approximate delivery amount 4,000 gallons.															
025	Ferric Chloride, Water 37%-42%	Tons	385	<ul style="list-style-type: none"> <li>Drinking water grade</li> <li>Product must consist of between 37%-42% of Ferric Chloride (FeCl<sub>3</sub>) by weight</li> <li>Specific Gravity must be between 1.390 – 1.480</li> <li>Insoluble matter must be less than 0.2%</li> <li>Must be high purity product manufactured by reacting chlorine gas with iron, HCl, ferrous sulfate, or ferrous chloride</li> <li>Must not contain more than 1.0% free acid expressed as Hydrochloric Acid</li> </ul>	Must meet AWWA Standard B407 (latest edition)	Contractor shall provide Certificate of Analysis (COA) with each delivery reflecting product manufacturing process and location. COA shall also include Specific Gravity, % FeCl, % HCl and % solution.															
029	Hydrofluosilicic Acid (25%)	30-gallon Drums	170	<ul style="list-style-type: none"> <li>Product must consist of not less than 23% solution hydrofluosilicic acid H<sub>2</sub>SiF<sub>6</sub>.</li> <li>Product shall not contain more than 0.020% heavy metals expressed as lead.</li> <li>Product shall be water white to straw yellow and free of suspended matter.</li> </ul>	Must meet AWWA Standard B703 (latest edition)	Deliver amount to Leesburg will be approximately 800 – 1,400 gallons per delivery due to the size of onsite chemical storage tanks.															
033	Methanol	Gallons	18,500	<table border="1"> <thead> <tr> <th>PARAMETER</th> <th>SPECIFICATION</th> <th>METHOD</th> </tr> </thead> <tbody> <tr> <td>Property</td> <td>Grade AA Requirement</td> <td></td> </tr> <tr> <td>Acetone and aldehydes, Percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Acetone, percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Ethanol, percent maximum</td> <td>0.001</td> <td>IMPCA 001-98</td> </tr> </tbody> </table>	PARAMETER	SPECIFICATION	METHOD	Property	Grade AA Requirement		Acetone and aldehydes, Percent maximum	0.003		Acetone, percent maximum	0.003		Ethanol, percent maximum	0.001	IMPCA 001-98	Must supply 99.85% methanol that meets the specifications for methanol as stated in the most recent version of the International Methanol Producers and	Methanol delivery trucks must be equipped with vapor recovery system compatible with ASA equipment.
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047	Potassium Permanganate (Pails)	Tons	5	<ul style="list-style-type: none"> <li>Contractor shall provide a current product analysis indicating %KMnO<sub>4</sub>, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.</li> <li>Product must contain KMnO<sub>4</sub> of not less than 97%.</li> <li>No more than 7% by weight of the free-flowing grade shall pass through a U.S. Standard Series No. 200 sieve, and no more than 20% by weight may be retained on a U.S. Standard Series No. 40 sieve.</li> <li>Bulk density shall be approximately 100 pounds per cubic foot, and shall be relatively dust free in handling.</li> <li>Specific gravity equal to 1.039 of a 6% solution by weight, at 68°F.</li> <li>Product shall be stable in storage for at least three (3) years.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B603 (latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Pails shall be ICC approved non-returnable high-density polyethylene with full open tops, weighing approximately 55 pounds and shall be NSF approved. Pails shall be pallet stacked and shrink wrapped for handling.</li> <li>Product delivery truck shall be capable of offloading pallets of buckets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>																																				
048	Powder Activated Carbon	Tons	25	<ul style="list-style-type: none"> <li>Product shall be finely powdered grade: sieve sizing as follows not less than:                             <ul style="list-style-type: none"> <li>99% passing a 100-mesh sieve</li> <li>95% passing a 200-mesh sieve</li> <li>90% passing a 325-mesh sieve</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA standard B-600 (latest version)</li> <li>Must meet US EPA Primary</li> </ul>	<ul style="list-style-type: none"> <li>Bagged carbon weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>Product delivery truck shall be capable of offloading pallets to the ground or loading</li> </ul>																																				

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				<ul style="list-style-type: none"> <li>Each respective bidder shall provide quantitative results demonstrating effective removal of Geosmin and MIB. The test results should include: Particle Sizing, Apparent Density, Hardness, Ash, Iodine and Tannin values. The product shall meet the following parameters.</li> <li>Iodine Number = 500 mg/g Min</li> <li>Tannin Value = 125 – 150 mg/L</li> <li>Apparent Density = 0.30 – 0.50 gms/ml.</li> </ul>	Drinking Water Standards	dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.
051	Sodium Bisulfite	Gallons	16,000	Must have product content of 38% liquid sodium bisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B601 (or latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>The liquid Sodium Bisulfite shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.</li> <li>All hatches of product tanker are to be sealed and furnished with numbered seal tags. Tags are to be removed only in the presence of utility staff and provided to utility staff upon arrival and/or offloading.</li> </ul>
058	Sodium Hypochlorite	55-gallon Drums	825	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (latest edition)</li> <li>Must meet VDH regulations</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	Product delivery truck shall be capable of offloading 55-gallon drums or 237- gallon totes to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.
060	Sodium Hypochlorite 15%	Gallons	69,000	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (latest edition)</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	The liquid sodium hypochlorite shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Approximate delivery amount 5,000 gallons.
065	Sulfuric Acid, 93%	Tons	130	<ul style="list-style-type: none"> <li>Product must consist of 93% sulfuric acid (H2SO4)</li> <li>Product shall be 66° Baume.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet US EPA Primary Drinking Water Standards (Drinking Water Grade)</li> </ul>	The liquid sodium hypochlorite shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Approximate delivery amount 3,000 gallons.

Town of Leesburg Delivery Locations

Deliveries shall be made between 7:00 AM and 3:00 PM EDT, Monday through Friday. Contractor shall verify delivery requirements

according to each of the following locations:

Kenneth Rollins Water Filtration Plant  
43234 Edwards Ferry Road  
Leesburg, VA 20176

Paxton Well  
305 Wildman Street  
Leesburg, VA 20176  
(Sodium Hypochlorite drums only)

Town of Leesburg Water Pollution  
Control Facility  
1391 Russell Branch Parkway  
Leesburg, VA 20175

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7. LOUDOUN WATER

Line Item #	Chemical	Unit	Estimated Quantity	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements
006	Aluminum Sulfate 48% Liquid	Gallons	225,000	Aqueous solution of Aluminum Sulfate	<ul style="list-style-type: none"> <li>• Must meet American Water Works Association (AWWA) Standard B403 (or latest edition)</li> <li>• Must meet US EPA Primary Drinking Water Standards (Drinking Water Grade)</li> </ul>	Product must be delivered in bulk tanker truck.
007	Ammonium Sulfate 40%, Liquid Totes	330-gallon Totes	58	None	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B302 (or latest edition)</li> <li>• Meets Virginia Department of Health (VDH) regulations</li> </ul>	Product must be shipped in approved 330-gallon totes. Product delivery truck shall be capable of offloading totes to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including dolly or jack.
008	Ammonium Hydroxide 19%	LBS	314,000	<ul style="list-style-type: none"> <li>• Aqueous solution of Liquefied, 19% Aqueous Ammonia, (Liquid Ammonium Hydroxide),</li> <li>• Reagent Grade or better, minimum 99.99 pure by volume</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B306 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The liquid ammonium hydroxide shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
010	Bio-sanitizer 2-7/8 70% disfgt tab bucket	Buckets	Small quantity	<ul style="list-style-type: none"> <li>• Calcium Hypochlorite 73% (70% available chlorine)</li> <li>• Inert ingredients 27% (includes 5.5-10% moisture)</li> <li>• Physical State: Solid</li> <li>• Color: White</li> <li>• Odor: Chlorine</li> <li>• pH: Alkaline</li> <li>• Bulk Density (G/CM<sup>3</sup>): 1.07 to 1.4 (67-71 lbs/ft<sup>3</sup>)</li> <li>• Solubility: 217 g/l (27°C)</li> </ul>	None	None
012	Calcium Hydroxide (Hydrated Lime)	Tons	5	None	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B202 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	<ul style="list-style-type: none"> <li>• The liquid calcium hydroxide shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.</li> <li>• Product delivery truck shall be capable of offloading to above ground chemical storage tank. Delivery truck shall provide all necessary equipment and means to</li> </ul>

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						offload.																											
016	Calcium Thiosulfate 24%	Tons	Small quantity	Dechlorination Grade Calcium Thiosulfate Solution (CTS) - a premixed solution used for the neutralizing of chlorine in water discharges to the environment.	None	None																											
017	Caustic Soda - 50%	Tons	120	None	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B501 (latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The liquid caustic soda shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.																											
023	Citric Acid 50%	Gallons	12,000	Aqueous solution of Citric Acid (50%)	<ul style="list-style-type: none"> <li>• Must meet VDH regulations</li> <li>• Must meet US EPA Primary Drinking Water Standards (Drinking Water Grade)</li> </ul>	The liquid citric acid shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.																											
028	Hydrofluosilicic Acid 23% - 25%	Tons	80	<ul style="list-style-type: none"> <li>• Product must consist of not less than 23% solution hydrofluosilicic acid, H<sub>2</sub>SiF<sub>6</sub>.</li> <li>• Product shall not contain more than 0.020% "heavy metals" expressed as lead.</li> <li>• Product shall be water white to straw yellow in color and free from suspended matter.</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B703 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	Product delivery truck shall be capable of offloading 55-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.																											
033	Methanol	Gallons	90,000	<table border="1"> <thead> <tr> <th>PARAMETER</th> <th>SPECIFICATION</th> <th>METHOD</th> </tr> </thead> <tbody> <tr> <td>Property</td> <td>Grade AA Requirement</td> <td></td> </tr> <tr> <td>Acetone and aldehydes, Percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Acetone, percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Ethanol, percent maximum</td> <td>0.001</td> <td>IMPCA 001-98</td> </tr> <tr> <td>Acidity (as Acetic Acid) Percent maximum</td> <td>0.003</td> <td>ASTM D 1613-96</td> </tr> <tr> <td>Appearance and hydrocarbons</td> <td>Free of opalescence, Suspended matter and sediment</td> <td>ASTM D 1722-90</td> </tr> <tr> <td>Carbonizable substances, color</td> <td>Not darker than Color Standard No. 50 of ASTM D1209, Platinum-Cobalt scale</td> <td>ASTM E 346-94</td> </tr> <tr> <td>Color</td> <td>Not darker than Color Standard No. 10 of ASTM D1209,</td> <td>ASTM D 1209-93</td> </tr> </tbody> </table>	PARAMETER	SPECIFICATION	METHOD	Property	Grade AA Requirement		Acetone and aldehydes, Percent maximum	0.003		Acetone, percent maximum	0.003		Ethanol, percent maximum	0.001	IMPCA 001-98	Acidity (as Acetic Acid) Percent maximum	0.003	ASTM D 1613-96	Appearance and hydrocarbons	Free of opalescence, Suspended matter and sediment	ASTM D 1722-90	Carbonizable substances, color	Not darker than Color Standard No. 50 of ASTM D1209, Platinum-Cobalt scale	ASTM E 346-94	Color	Not darker than Color Standard No. 10 of ASTM D1209,	ASTM D 1209-93	Must supply 99.85% methanol that meets the specifications for methanol as stated in the most recent version of the International Methanol Producers and Consumers Association (IMPCA) Methanol Reference Specifications	Methanol delivery trucks must be equipped with vapor recovery system compatible with utility equipment.
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	Platinum-Cobalt scale																																	
Distillation range	64.6°C± .10° at 760 mm Hg	ASTM D 1078-97																																
Specific gravity	0.7928 max at 20°C	ASTM D 891-95																																
Percent methanol by weight, Minimum	99.85																																	
Nonvolatile content, gm/100 ml, Maximum	0.0010	ASTM D 1353-96																																
Odor	Characteristic, non-residual																																	
Permanganate	No discharge of color in 50 Minutes																																	
Water, percent maximum	0.10																																	
Total Iron	Max 0.1 mg/kg	ASTM E 394-94																																
035	Orthophosphate 75%	Tons	8	None		<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B506 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The liquid orthophosphate shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Product delivery truck shall be capable of offloading to above ground chemical storage tank. Delivery truck shall provide all necessary equipment and means to offload.																											
036	Orthophosphate 36% Totes	Tons	35	Phosphoric Acid 36%		<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B506 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Product delivery truck shall be capable of offloading 237-gallon totes to Goose Creek location and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> <li>• Product delivery tanker shall be capable of delivering bulk chemical to Trap Rock location and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>																											
040	Pollu Tech C-498 50 Pound Bags	50-pound Bags	Small quantity	C-498 cationic flocculant.		Must meet VDH regulations	Bagged C-498 cationic flocculant weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.																											
041	Polyaluminum Chloride	Tons	2,800	<ul style="list-style-type: none"> <li>• % Al<sub>2</sub>O<sub>3</sub> 12.5 ± 0.5</li> <li>• % Al 6.6 ± 0.3</li> <li>• % Basicity &gt; 70</li> <li>• % Sulfate 1.7 ± 0.5</li> <li>• % Chloride &gt; 9.0</li> </ul>	<ul style="list-style-type: none"> <li>• Appearance: Color may vary</li> <li>• Specific Gravity @60°F: 1.29 ± 0.03</li> <li>• Product Weight: ~10.76 Lbs./Gallon</li> <li>• pH (neat): 2.4 ± 0.3</li> <li>• Freezing Point -26°F</li> </ul>	Must conform to AWWA standard B408-10 (latest edition)	None																											

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048	Powder Activated Carbon	Tons	5	<ul style="list-style-type: none"> <li>Product shall be finely powdered grade: sieve sizing as follows not less than:                             <ul style="list-style-type: none"> <li>99% passing a 100-mesh sieve</li> <li>95% passing a 200-mesh sieve</li> <li>90% passing a 325-mesh sieve</li> </ul> </li> <li>Each respective bidder shall provide quantitative results demonstrating effective removal of Geosmin and MIB. The test results should include: Particle Sizing, Apparent Density, Hardness, Ash, Iodine and Tannin values. The product shall meet the following parameters.                             <ul style="list-style-type: none"> <li>Iodine Number = 500 mg/g Min</li> <li>Tannin Value = 125 – 150 mg/L</li> <li>Apparent Density = 0.30 – 0.50 gms/ml.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Must conform to AWWA standard B-600-96 or latest version</li> <li>Meets VDH regulations</li> <li>Meets USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Bagged carbon weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>		
049	Sodium Fluoride Bags	Bags	Small quantity	<ul style="list-style-type: none"> <li>Coarse crystalline Sodium</li> <li>Concentration: 99%</li> <li>Color: White</li> <li>pH: 7.4 (68°F (20°C))</li> <li>Bulk Density: 1,000-1,400 kg/m<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B701 (or latest version)</li> <li>Must meet VDH regulations</li> </ul>	Fluoride shipped in 50 lbs (22.68 kg) net, 5-ply, Kraft paper bags with moisture barrier. Bagged sodium fluoride shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.		
050	Sodium Sulfite 92.3% -D-CHLOR bucket	Buckets	Small quantity	<table border="0"> <tr> <td> <ul style="list-style-type: none"> <li>Sodium sulfite (Na<sub>2</sub>SO<sub>3</sub>)</li> <li>Molecular Weight: 126.043 gm/mol</li> <li>% of Mixture: 92.3</li> <li>Inert Ingredients 7.7%.</li> <li>Color: Pale green, dry, solid tablet.</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>Odor: Slight sulfur odor</li> <li>Specific gravity of tablet: 2.0 min. (H<sub>2</sub>O = 1)</li> <li>pH of solution: Alkaline.</li> <li>Solubility in water: 22% by weight at 80°F (or 260°C)</li> <li>Bulk density: 125 lbs/ft<sup>3</sup> (2.0 g/cm<sup>3</sup>)</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>Sodium sulfite (Na<sub>2</sub>SO<sub>3</sub>)</li> <li>Molecular Weight: 126.043 gm/mol</li> <li>% of Mixture: 92.3</li> <li>Inert Ingredients 7.7%.</li> <li>Color: Pale green, dry, solid tablet.</li> </ul>	<ul style="list-style-type: none"> <li>Odor: Slight sulfur odor</li> <li>Specific gravity of tablet: 2.0 min. (H<sub>2</sub>O = 1)</li> <li>pH of solution: Alkaline.</li> <li>Solubility in water: 22% by weight at 80°F (or 260°C)</li> <li>Bulk density: 125 lbs/ft<sup>3</sup> (2.0 g/cm<sup>3</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>Must comply with Toxic Substances Control Act 8(b)</li> </ul>	None
<ul style="list-style-type: none"> <li>Sodium sulfite (Na<sub>2</sub>SO<sub>3</sub>)</li> <li>Molecular Weight: 126.043 gm/mol</li> <li>% of Mixture: 92.3</li> <li>Inert Ingredients 7.7%.</li> <li>Color: Pale green, dry, solid tablet.</li> </ul>	<ul style="list-style-type: none"> <li>Odor: Slight sulfur odor</li> <li>Specific gravity of tablet: 2.0 min. (H<sub>2</sub>O = 1)</li> <li>pH of solution: Alkaline.</li> <li>Solubility in water: 22% by weight at 80°F (or 260°C)</li> <li>Bulk density: 125 lbs/ft<sup>3</sup> (2.0 g/cm<sup>3</sup>)</li> </ul>							
052	Sodium Bisulfite 40%	55-gallon Drums	Small quantity	Must have product content of 38% liquid sodium bisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B601 (or latest edition)</li> <li>Must meet VDH regulations</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>The liquid Sodium Bisulfite shall be shipped in 55-gallon drums that meet the cleanliness required in drinking water treatment.</li> <li>Product delivery truck shall be capable of offloading 55-gallon drums to the ground with hydraulic gate or other mechanism.</li> <li>Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>		
053	Sodium Bisulfite Totes	Gallons	17,000	The product furnished shall have product content of 38% liquid sodium bisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B601 (or latest version)</li> <li>Must meet VDH regulations</li> <li>Must meet USEPA Primary Drinking Water Standards</li> </ul>	Product delivery truck shall be capable of offloading 237-gallon totes and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.		

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057	Sodium Hydroxide 23%	Dry Storage Tons	Small quantity	<ul style="list-style-type: none"> <li>Product must consist of not less than 25% solution anhydrous sodium hydroxide, NaOH.</li> <li>Specific gravity shall be 1.278 at 60° F.</li> </ul>	Must meet AWWA Standard B501 (or latest edition)	Product delivery truck shall be capable of offloading 237-gallon totes and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.
060	Sodium Hypochlorite 15%	Gallons	340,000	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B601 (or latest version)</li> <li>Must meet VDH regulations</li> <li>Must meet USEPA Primary Drinking Water Standards</li> </ul>	Product shall be delivered via bulk tanker.
064	Sodium Permanganate 20% Totes	Tons	36	<ul style="list-style-type: none"> <li>Product must consist of 19.5 - 21.5% as NaMnO4.</li> <li>Product shall be miscible with water in all proportions.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B603 (or latest version)</li> <li>Must meet VDH regulations</li> <li>Must meet USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Product delivery truck shall be capable of offloading 275-gallon totes to the ground with hydraulic gate or other mechanism.</li> <li>Product delivery truck shall be capable of offloading totes and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.</li> </ul>

Loudoun Water Delivery Locations

Contractor shall verify delivery requirements according to each of the following locations:

Goose Creek Water Treatment Facility  
 20521 Belmont Ridge Road  
 Ashburn, VA 20147

Trap Rock Water Treatment Facility  
 Cochran Mill Road,  
 Leesburg, VA 20175

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8. PRINCE WILLIAM COUNTY SERVICE AUTHORITY (PWCSA)

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements																								
017	Caustic Soda - 50%	Tons	35	None	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B501 (or latest edition)</li> <li>Must meet VDH regulations</li> </ul>	The liquid caustic soda shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.																								
025	Ferric Chloride, Water 37%-42%	Tons	540	<ul style="list-style-type: none"> <li>Drinking water grade</li> <li>Product must consist of between 37%-42% of Ferric Chloride (FeCl<sub>3</sub>) by weight</li> <li>Specific Gravity must be between 1.390 – 1.480</li> <li>Insoluble matter must be less than 0.2%</li> <li>Must be high purity product manufactured by reacting chlorine gas with iron, HCl, ferrous sulfate, or ferrous chloride.</li> <li>Must not contain more than 1.0% free acid expressed as Hydrochloric Acid</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B407 (latest edition)</li> <li>Must meet VDH regulations</li> </ul>	Contractor shall provide Certificate of Analysis (COA) with each delivery reflecting product manufacturing process and location. COA shall also include Specific Gravity, % FeCl, % HCl and % solution.																								
031	Quicklime Medium Pebble	Tons	552	A ¾" x ¼" high calcium, highly reactive pebble lime.	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B202 (or latest edition)</li> <li>Must meet VDH regulations</li> </ul>	The quicklime shall be shipped in bulk.																								
033	Methanol	Gallons	380,000	<table border="1"> <thead> <tr> <th>PARAMETER</th> <th>SPECIFICATION</th> <th>METHOD</th> </tr> </thead> <tbody> <tr> <td>Property</td> <td>Grade AA Requirement</td> <td></td> </tr> <tr> <td>Acetone and aldehydes, Percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Acetone, percent maximum</td> <td>0.003</td> <td></td> </tr> <tr> <td>Ethanol, percent maximum</td> <td>0.001</td> <td>IMPCA 001-98</td> </tr> <tr> <td>Acidity (as Acetic Acid) Percent maximum</td> <td>0.003</td> <td>ASTM D 1613-96</td> </tr> <tr> <td>Appearance and hydrocarbons</td> <td>Free of opalescence, Suspended matter and sediment</td> <td>ASTM D 1722-90</td> </tr> <tr> <td>Carbonizable substances, color</td> <td>Not darker than Color Standard No. 50 of ASTM D1209,</td> <td>ASTM E 346-94</td> </tr> </tbody> </table>	PARAMETER	SPECIFICATION	METHOD	Property	Grade AA Requirement		Acetone and aldehydes, Percent maximum	0.003		Acetone, percent maximum	0.003		Ethanol, percent maximum	0.001	IMPCA 001-98	Acidity (as Acetic Acid) Percent maximum	0.003	ASTM D 1613-96	Appearance and hydrocarbons	Free of opalescence, Suspended matter and sediment	ASTM D 1722-90	Carbonizable substances, color	Not darker than Color Standard No. 50 of ASTM D1209,	ASTM E 346-94	Must supply 99.85% methanol that meets the specifications for methanol as stated in the most recent version of the International Methanol Producers and Consumers Association (IMPCA) Methanol Reference Specifications	Methanol delivery trucks must be equipped with vapor recovery system compatible with PWCSA equipment.
PARAMETER	SPECIFICATION	METHOD																												
Property	Grade AA Requirement																													
Acetone and aldehydes, Percent maximum	0.003																													
Acetone, percent maximum	0.003																													
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					Platinum-Cobalt scale				
				Color	Not darker than Color Standard No. 10 of ASTM D1209, Platinum-Cobalt scale	ASTM D 1209-93			
				Distillation range	64.6°C± .10° at 760 mm Hg	ASTM D 1078-97			
				Specific gravity	0.7928 max at 20°C	ASTM D 891-95			
				Percent methanol by weight, Minimum	99.85				
				Nonvolatile content, gm/100 ml, Maximum	0.0010	ASTM D 1353-96			
				Odor	Characteristic, non-residual				
				Permanganate	No discharge of color in 50 Minutes				
				Water, percent maximum	0.10				
				Total Iron	Max 0.1 mg/kg	ASTM E 394-94			
062	Sodium Hypochlorite (Full)	Gallons	65,000	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>			<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (or latest edition)</li> <li>Must meet VDH regulations</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>		Product shall be delivered via tanker truck.

PWCSA Delivery Locations

Deliveries shall be made to the following address between 6:00 AM and 2:00 PM EDT, Monday through Friday:  
 1851 Rippon Blvd.  
 Woodbridge, VA 22191

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9. TOWN OF PURCELLVILLE

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements
004	Aluminum Sulfate	Tons	12		<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B403 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The aluminum sulfate shall be shipped weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.
038	Phosphoric Acid	Tons	1-2	The product furnished shall have product content of 85% liquid phosphoric acid (drinking water grade) free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B507 (latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The liquid phosphoric acid shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
047	Potassium Permanganate (Pails)	Tons	0.25	<ul style="list-style-type: none"> <li>• Contractor shall provide a current product analysis indicating %KMnO<sub>4</sub>, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.</li> <li>• Product must contain KMnO<sub>4</sub> of not less than 97%.</li> <li>• No more than 7% by weight of the free-flowing grade shall pass through a U.S. Standard Series No. 200 sieve, and no more than 20% by weight may be retained on a U.S. Standard Series No. 40 sieve.</li> <li>• Bulk density shall be approximately 100 pounds per cubic foot, and shall be relatively dust free in handling.</li> <li>• Specific gravity equal to 1.039 of a 6% solution by weight, at 68°F.</li> <li>• Product shall be stable in storage for at least three (3) years.</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B603 (or latest edition)</li> <li>• Must meet VDH regulations</li> <li>• Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>• Pails shall be ICC approved non-returnable high-density polyethylene with full open tops, weighing approximately 55 pounds and shall be NSF approved. Pails shall be pallet stacked and shrink wrapped for handling.</li> <li>• Product delivery truck shall be capable of offloading pallets of buckets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>
051	Sodium Bisulfite	Gallons	660	Must have product content of 38% liquid sodium bisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B601 (latest edition)</li> <li>• Must meet VDH regulations</li> <li>• Must meet US EPA Primary Drinking Water Standards</li> </ul>	The liquid Sodium Bisulfite shall be shipped via 55-gallon drums which meet the cleanliness required in drinking water treatment. Product delivery truck shall be capable of offloading to above ground chemical storage tank.
054	Sodium Carbonate (Soda Ash)	Tons	9	<ul style="list-style-type: none"> <li>• Product shall have a Bulk Density of 0.7 – 0.9 g/l</li> <li>• Product shall be a Free Flowing, finely powdered grade.</li> <li>• Contractor shall provide a current product analysis indicating % NaCO and NaO, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA specification B201 - 08 or latest edition</li> <li>• Must meet VDH regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Bagged Sodium Carbonate (Soda Ash) weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> </ul>

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				<ul style="list-style-type: none"> <li>Product must contain Sodium Carbonate (NaCO) of not less than 99%, of which not less than 58% shall be in the form of Sodium Oxide (NaO).</li> <li>Product shall not contain insoluble matter exceeding 0.05%</li> <li>Product shall not contain large lumps, crystals, chips, or other foreign matter. Product deemed unacceptable by Owner due to poor quality, such as clumping or a failure to homogeneously dissolve in solution that will clog metering pumps and appurtenances will be rejected.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
062	Sodium Hypochlorite (Full)	Gallons	3,500	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (or latest edition)</li> <li>Must meet VDH regulations</li> <li>Must meet USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Product delivery truck shall be capable of offloading 55-gallon drums and 300-gallon mini bulk product to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>
063	Sodium Hypochlorite (Short)	Gallons	6,160	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B300 (or latest edition)</li> <li>Must meet VDH regulations</li> <li>Must meet US EPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Product delivery truck shall be capable of offloading 55-gallon drums and/or 300-gallon mini bulk product to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>

Town of Purcellville Delivery Locations

Deliveries to the Town of Purcellville shall be made between 5:00 AM through 7:00 PM EDT, Monday through Friday, and between 5:00 AM and 4:00 PM EDT, Saturday and Sunday, at the following locations:

Water Treatment Plant  
 16153 Short Hill Road  
 Purcellville, VA 20132

Forbs/Cornwell Building (Well Facility)  
 320 North Hatcher Avenue  
 Purcellville, VA 20132

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10. STAFFORD COUNTY

Line Item #	Chemical	Unit	Estimated Quantity per Annum	Unique Chemical Specifications	Applicable Standards	Unique Delivery Requirements
004	Aluminum Sulfate	Tons	769	None	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B403 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The liquid aluminum sulfate shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
008	Ammonium Hydroxide 19%	Gallons	20,959	<ul style="list-style-type: none"> <li>• Aqueous solution of Liquefied, 19% Aqueous Ammonia, (Liquid Ammonium Hydroxide),</li> <li>• Reagent Grade or better, minimum 99.99 pure by volume</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B306 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	<ul style="list-style-type: none"> <li>• The liquid ammonium hydroxide shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.</li> <li>• Product delivery truck shall be capable of offloading to above ground chemical storage tank. Delivery truck shall provide all necessary equipment and means to offload.</li> </ul>
014	Calcium Hydroxide (Hydrated Lime)	Gallons	150,000	None	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B202 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The liquid calcium hydroxide shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment
017	Caustic Soda - 50%	Tons	467	None	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B501 (or latest edition)</li> <li>• Must meet VDH regulations</li> </ul>	The liquid caustic soda shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.
023	Citric Acid 50%	Gallons	62,400	None	<ul style="list-style-type: none"> <li>• Must meet VDH regulations</li> </ul>	<ul style="list-style-type: none"> <li>• The liquid citric acid shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment.</li> <li>• Product delivery truck shall be capable of offloading to above ground chemical storage tank.</li> <li>• Delivery truck shall provide all necessary equipment and means to offload</li> </ul>
026	Ferric Sulfate, Liquid	LBS	286,505	<ul style="list-style-type: none"> <li>• Water-soluble ferrous iron (Fe<sup>2+</sup>) shall not exceed 0.15%, in liquid ferric sulfate.</li> <li>• Water insoluble matter shall not be more than 0.1% and shall be insoluble in liquid ferric sulfate.</li> </ul>	<ul style="list-style-type: none"> <li>• Must meet AWWA Standard B406</li> <li>• Must meet VDH regulations</li> </ul>	<ul style="list-style-type: none"> <li>• The liquid ferric sulfate shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Product delivery</li> </ul>



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				<ul style="list-style-type: none"> <li>Liquid ferric sulfate shall contain sufficient acid as H<sub>2</sub>SO<sub>4</sub> so solution pH is 2 or less to ensure product stability. Percent H<sub>2</sub>SO<sub>4</sub> shall not exceed 0.25%. Liquid ferric sulfate shall contain not less than 12.8% and not more than 14% water-soluble ferric iron (Fe<sup>3+</sup>). No additional payment will be made for any shipment of ferric sulfate that exceeds the 12.8% minimum.</li> <li>Liquid ferric sulfate shall not be a by-product from any other process or be manufactured using materials that are either by-products or waste products. Liquid Ferric Sulfate shall be manufactured from a source of virgin mined ore and selected high purity components, i.e., magnetite, hematite, and a "water white" grade of sulfuric acid. Ferric sulfate shall not contain specific impurities in excess of the following limit (by weight), for an expected maximum dosage not exceeding 100 mg/L based on ferric sulfate content. The Water Chemicals Codex should be consulted if alternative impurity limits are to be considered based on varying dosage levels.</li> </ul> <table border="1"> <tr> <td>Arsenic 1.0 mg/kg</td> <td>Copper 5.0 mg/kg</td> </tr> <tr> <td>Cadmium 0.5 mg/kg</td> <td>Zinc 10.0 mg/kg</td> </tr> <tr> <td>Chromium 5.0 mg/kg</td> <td>Manganese 100.0 mg/kg</td> </tr> <tr> <td>Lead 1.0 mg/kg</td> <td>6.0 mg/kg</td> </tr> <tr> <td>Mercury 0.2 mg/kg</td> <td>Chloride 100.0 mg/kg</td> </tr> <tr> <td>Selenium 3.0 mg/kg</td> <td>Fluoride 60.0 mg/kg</td> </tr> <tr> <td>Silver 11.0 mg/kg</td> <td>Titanium 75.0 mg/kg</td> </tr> <tr> <td>Nitrites (AS N) 75.0 mg/kg</td> <td>Sodium 1000.0 mg/kg</td> </tr> <tr> <td>Total Organic Carbon 15.0 mg/kg</td> <td>Molybdenum 15.0 mg/kg</td> </tr> <tr> <td>Nickel 40.0 mg/kg</td> <td>Antimony 1.0 mg/kg</td> </tr> <tr> <td>Beryllium 1.0 mg/kg</td> <td>Cyanide 1.0 mg/kg</td> </tr> <tr> <td>Thallium 10.0 mg/k</td> <td>Total Nitrate an Nitrite (AS N) 150 mg/kg</td> </tr> </table>	Arsenic 1.0 mg/kg	Copper 5.0 mg/kg	Cadmium 0.5 mg/kg	Zinc 10.0 mg/kg	Chromium 5.0 mg/kg	Manganese 100.0 mg/kg	Lead 1.0 mg/kg	6.0 mg/kg	Mercury 0.2 mg/kg	Chloride 100.0 mg/kg	Selenium 3.0 mg/kg	Fluoride 60.0 mg/kg	Silver 11.0 mg/kg	Titanium 75.0 mg/kg	Nitrites (AS N) 75.0 mg/kg	Sodium 1000.0 mg/kg	Total Organic Carbon 15.0 mg/kg	Molybdenum 15.0 mg/kg	Nickel 40.0 mg/kg	Antimony 1.0 mg/kg	Beryllium 1.0 mg/kg	Cyanide 1.0 mg/kg	Thallium 10.0 mg/k	Total Nitrate an Nitrite (AS N) 150 mg/kg		<p>truck shall be capable of offloading to above ground chemical storage tank. Delivery truck shall provide all necessary equipment and means to offload.</p> <ul style="list-style-type: none"> <li>Contractor shall provide Certificate of Analysis (COA) with each delivery reflecting product manufacturing process and location.</li> </ul>
Arsenic 1.0 mg/kg	Copper 5.0 mg/kg																													
Cadmium 0.5 mg/kg	Zinc 10.0 mg/kg																													
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028	Hydrofluosalicic Acid 23% - 25%	Tons	88	<ul style="list-style-type: none"> <li>Product must consist of not less than 23% solution hydrofluosilicic acid, H<sub>2</sub>SiF<sub>6</sub>.</li> <li>Product shall not contain more than 0.020% "heavy metals" expressed as lead.</li> <li>Product shall be water white to straw yellow in color and free from suspended matter.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B703 (or latest edition)</li> <li>Must meet VDH regulations</li> </ul>	<p>Product delivery truck shall be capable of offloading 55-gallon drums to the ground with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</p>																								
032	Magnesium Hydroxide	Gallons	100,631	None	<p>Must meet VDH regulations</p>	<ul style="list-style-type: none"> <li>The liquid Magnesium Hydroxide shall be shipped via tank trucks.</li> <li>Product delivery truck shall be capable of offloading to above ground chemical storage tank.</li> <li>Delivery truck shall provide all necessary equipment and means to offload.</li> </ul>																								
035	Orthophosphate 75%	Tons	31	None	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B506 (or</li> </ul>	<p>The liquid orthophosphate shall be shipped via tank trucks which meet the</p>																								

## RFP 18-008 WATER & WASTEWATER TREATMENT CHEMICALS

					latest edition) • Must meet VDH regulations	cleanliness required in drinking water treatment. Product delivery truck shall be capable of offloading to above ground chemical storage tank. Delivery truck shall provide all necessary equipment and means to offload.
037	Peroxide	Gallons	25,000	<ul style="list-style-type: none"> <li>• 50% solution</li> <li>• BASF - ZETAG 8846FS preferred</li> </ul>	• Must meet VDH regulations	The liquid hydrogen peroxide shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Product delivery truck shall be capable of offloading to above ground chemical storage tank. Delivery truck shall provide all necessary equipment and means to offload.
040	Pollu Tech C-498 50 Pound Bags	50-pound Bags	5,729	C-498 cationic flocculant.	Must meet VDH regulations	<ul style="list-style-type: none"> <li>• Bagged C-498 cationic flocculant weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>• Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
043	Polymer	LBS	143,500	<ul style="list-style-type: none"> <li>• Polymer shall be a high cationic type liquid emulsion used as a flocculant for the purpose of optimizing dewatering of wastewater sludge.</li> <li>• The polymer shall be in liquid form having a minimum shelf life of three (3) months for any unopened tote bins and shall meet the following minimum performance requirements: <ul style="list-style-type: none"> <li>• Percent Free Solids: 1% to 1.5%</li> <li>• Cake, percent dry solids: 18% minimum</li> <li>• Capture, percentage: 95% – 98 %</li> <li>• Minimum &amp; maximum feed rates: 65 gallons per minute (gpm) to 150 gpm</li> <li>• Maximum Polymer dosage: 30 pounds/ dry ton</li> </ul> </li> </ul>	All products shall be tested and qualified at the location of intended use. The product tested shall be the same as the product delivered; however, the requesting utility reserves the right to use a different product if tests show that a significant improvement in performance may be realized and the product will be supplied at the same bid price or less.	Polymer Solution will be delivered as liquid in non-ferrous 275-gallon tote bins. Product delivery truck shall be capable of offloading totes and moving product from delivery vehicle to tank inside of plant. Delivery personnel responsible for safe transfer and clean up.
044	Polymer, Elusion (equal to SE-890 Clarifloc)	LBS	13,370	<ul style="list-style-type: none"> <li>• Polymer shall be bulk sacks (1,500 lbs per sack) of emulsion polymer used as a flocculant to optimize dewatering of wastewater sludge, equal to Clarifloc SE-890</li> <li>• Must have minimum shelf life of three (3) months for any sack</li> </ul>	All products shall be tested and qualified at the location of intended use. The product tested shall be the same as the	Product delivery truck shall be capable of offloading sacks and moving product from delivery vehicle to inside of plant. Delivery personnel responsible for safe transfer and clean up.

RFP 18-008 WATER & WASTEWATER TREATMENT CHEMICALS

					product delivered; however, the requesting utility reserves the right to use a different product if tests show that a significant improvement in performance may be realized and the product will be supplied at the same bid price or less.	
047	Potassium Permanganate (Pails)	Tons	16	<ul style="list-style-type: none"> <li>Contractor shall provide a current product analysis indicating %KMnO<sub>4</sub>, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.</li> <li>Product must contain KMnO<sub>4</sub> of not less than 97%.</li> <li>No more than 7% by weight of the free-flowing grade shall pass through a U.S. Standard Series No. 200 sieve, and no more than 20% by weight may be retained on a U.S. Standard Series No. 40 sieve.</li> <li>Bulk density shall be approximately 100 pounds per cubic foot, and shall be relatively dust free in handling.</li> <li>Specific gravity equal to 1.039 of a 6% solution by weight, at 68°F.</li> <li>Product shall be stable in storage for at least three (3) years.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B603 (or latest edition)</li> <li>Must meet VDH regulations</li> <li>Must meet USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Pails shall be ICC approved non-returnable high-density polyethylene with full open tops, weighing approximately 55 pounds and shall be NSF approved. Pails shall be pallet stacked and shrink wrapped for handling.</li> <li>Product delivery truck shall be capable of offloading pallets of buckets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including drum dolly or jack.</li> </ul>
048	Powder Activated Carbon	Tons	93,700	<ul style="list-style-type: none"> <li>Product shall be finely powdered grade: sieve sizing as follows not less than:                             <ul style="list-style-type: none"> <li>99% passing a 100-mesh sieve</li> <li>95% passing a 200-mesh sieve</li> <li>90% passing a 325-mesh sieve</li> </ul> </li> <li>Each respective bidder shall provide quantitative results demonstrating effective removal of Geosmin and MIB. The test results should include: Particle Sizing, Apparent Density, Hardness, Ash, Iodine and Tannin values. The product shall meet the following parameters.                             <ul style="list-style-type: none"> <li>Iodine Number = 500 mg/g Min</li> <li>Tannin Value = 125 – 150 mg/L</li> <li>Apparent Density = 0.30 – 0.50 gms/ml.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA standard B-600-96 or latest version</li> <li>Must meet VDH regulations</li> <li>Must meet USEPA Primary Drinking Water Standards</li> </ul>	<ul style="list-style-type: none"> <li>Bagged carbon weighing approximately 50 pounds per bag shall be pallet stacked and shrink wrapped for handling. Bags are to be durable and dust tight.</li> <li>Product delivery truck shall be capable of offloading pallets to the ground or loading dock with hydraulic gate or other mechanism. Delivery truck shall provide all necessary equipment and means to offload, including pallet jack or other pallet handling device.</li> </ul>
051	Sodium Bisulfite	Gallons	91,464	Must have product content of 38% liquid sodium bisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water and wastewater treatment equipment	<ul style="list-style-type: none"> <li>Must meet AWWA Standard B601 (or latest edition)</li> <li>Must meet VDH regulations</li> <li>Must meet US EPA Primary Drinking Water</li> </ul>	The liquid Sodium Bisulfite shall be shipped via tank trucks which meet the cleanliness required in drinking water treatment. Product delivery truck shall be capable of offloading to above ground chemical storage tank.

**RFP 18-008 WATER & WASTEWATER TREATMENT CHEMICALS**

					Standards	
060	Sodium Hypochlorite 15%	Gallons	229,586	<ul style="list-style-type: none"> <li>Product must consist of not less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.</li> <li>Product shall be completely water soluble, have a pH between 11 and 13, a specific gravity of 1.206, and a boiling point of 110°C for 15% NaOCL.</li> <li>Product shall not contain metals, minerals or organic substances in quantities capable of causing deleterious or injurious effects upon the health of the consumer of potable water or contain substances causing the water so treated to fail to meet the requirements of the USEPA Primary Drinking Water Standards.</li> <li>Product shall not contain particles of sand, grit, coke, clay or gelatinous material in sizes that will clog metering pumps and appurtenances.</li> </ul>	<ul style="list-style-type: none"> <li>Must meet AWWA specification B300 (or latest edition)</li> <li>Must meet VDH regulations</li> </ul>	None

Stafford County Delivery Locations

Deliveries to Stafford County may be made to the following water and wastewater treatment facilities 24/7. Deliveries to the following chemical sites shall be made between 7:00 AM and 3:30 PM EDT, Monday through Friday. Contractor shall verify delivery requirements according to each of the following locations:

Lake Mooney Waterworks  
 500 Greenbank Road  
 Fredericksburg, VA 22406

Aquia Wastewater Treatment Facility  
 75 Coal Landing Road  
 Stafford, VA 22554

Chemical Sites (Peroxide)

Ps-115 Celebrate VA Section 5 - 317 Montera Ave, Fredericksburg VA 22406  
 Ps-117 Leland Station Switchyard - Switch Yard Ct, Fredericksburg VA 22405  
 Ps-05 Aquia @ Cruiser - 3806 Aquia Drive, Stafford VA 22554  
 Ps-98 Argyle Hills - 61 Rubin’s Walk, Fredericksburg VA 22405  
 Ps-102 Deacon Road Estates - 44 Adrian Way, Fredericksburg VA 22405  
 Ps-60 Falls Run - 113 Washington St, Fredericksburg VA 22405

Chemical Sites (Calcium Hydroxide)

Ps-19 Camp Barrett - 300 Onville Road, Quantico MCB  
 Ps- 49 Garrisonville - 1234 Garrisonville Rd, Stafford VA 22556  
 Ps-108 Stafford Hospital - 101 Hospital Center Blvd, Stafford VA 22554  
 Ps-64 Stafford Lakes - 201 Village Parkway, Fredericksburg VA 22405  
 Ps-80 Claiborne Run - 146 Cool Springs Rd, Fredericksburg VA 22405

**VI. PRICE PROPOSAL**

(See attached Excel spreadsheet labeled 18-008 RFP Table A)

**PROPOSAL CHECKLIST**

<u>Item</u>	<u>Attached</u>	<u>Submitted w/ RFI</u>
PROPOSAL CHECKLIST	_____	
Table A PRICE PROPOSAL FORM	_____	
Attachment A PROPOSER QUALIFICATIONS FORM	_____	_____
Attachment B CONTACT INFORMATION FORM	_____	_____
Attachment C NON-COLLUSION AFFIDAVIT	_____	_____
Attachment D PROPOSER'S EXPERIENCE/REFERENCES	_____	_____
Attachment E PROPOSAL REPLY LABEL	_____	_____
Certificate of Insurance (see Terms and Conditions)	_____	_____
MSDS Sheets	_____	_____
Sample Invoice	_____	
Acknowledgements	YES	Exceptions
Attachment F Cooperative Rider Clause	_____	_____
Attachment G Terms and Conditions	_____	_____

If a Proposer is unable to accept all or parts Attachments F & G, Proposer must indicate that it has exceptions and provide an attachment indicating the exceptions. Exceptions may cause the Proposal to be disqualified. If no exceptions are noted, then checking "yes" indicates acceptance of the Cooperative Rider Clause and Terms and Conditions as written.

**Attachment A**  
**PROPOSER QUALIFICATION FORM**

1. NAME OF PROPOSER: \_\_\_\_\_

2. PERMANENT MAILING ADDRESS: \_\_\_\_\_

3. YEAR & STATE INCORPORATED: \_\_\_\_\_

4. DUN AND BRADSTREET D-U-N-S # \_\_\_\_\_

5. HOW MANY YEARS HAVE YOU ENGAGED IN BUSINESS UNDER YOUR PRESENT FIRM

NAME: \_\_\_\_\_ YEARS \_\_\_\_\_

6. GENERAL CHARACTER OF WORK PERFORMED BY YOUR COMPANY:

\_\_\_\_\_  
\_\_\_\_\_

7. HAVE YOU EVER DEFAULTED ON A CONTRACT?       YES       NO

IF YES, WHY? \_\_\_\_\_

\_\_\_\_\_

8. ATTACH A LISTING BY PRODUCT LINE OF ALL MANUFACTURES FOR WHOM YOUR COMPANY IS AN AUTHORIZED DEALER/DISTRIBUTOR/RESALER

9. NAME OF BANKS WITH WHICH YOU DO BUSINESS:

\_\_\_\_\_  
\_\_\_\_\_

10. DO YOU GRANT THE AWARDDING AUTHORITY PERMISSION TO CONTACT THIS (THESE) MANUFACTURES AND LENDING INSTITUTION(S)?       YES       NO

By signing this form, you acknowledge compliance with all terms and conditions of this Proposal.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_ Company: \_\_\_\_\_

**Attachment B**

**CONTACT INFORMATION FORM**

**Proposer Company Name** \_\_\_\_\_

**Contact for Proposal**

Name \_\_\_\_\_

Title \_\_\_\_\_

Phone number \_\_\_\_\_

Email address \_\_\_\_\_

**Sales Representative Contact**

Name \_\_\_\_\_

Title \_\_\_\_\_

Phone number \_\_\_\_\_

Email address \_\_\_\_\_

Area covered: \_\_\_\_\_ (“all”, or  
list)

**Service/Support Representative Contact**

Name \_\_\_\_\_

Title \_\_\_\_\_

Phone number \_\_\_\_\_

Email address \_\_\_\_\_

Area covered: \_\_\_\_\_ (“all”, or  
list)

Use additional sheet for more sales/support representatives

Attachment C

NON-COLLUSION AFFIDAVIT

DATE \_\_\_\_\_

TO: Metropolitan Washington Council of Governments,  
777 North Capitol Street, NE, Suite 300  
Washington, DC 20002

To Whom It May Concern:

This is to certify that the undersigned PROPOSER has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive in connection with this Proposal submitted Metropolitan Washington Council of Governments.

In addition, the Proposer also certifies that they are in good standing and not on any debarred lists with any government Participating Agency including Local, Federal and State Governments.

RFP – 18-008 Water Treatment Chemicals

Name of Proposer \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title of Authorized Representative

Swore to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

My commission expires \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

(Notary Seal)



**Attachment D**

**PROPOSER'S EXPERIENCE/REFERENCES**

Name of Proposer \_\_\_\_\_

REFERENCES are to be provided from three (3) other clients who are being or have been provided by the Proposer similar products, services and scope of work.

Complete contact information for each reference, including name, telephone number, mailing address and E-mail address, must be included with the Proposal.

A Proposer, which, in the sole judgment of the offeror, lacks sufficient specific experience, may be deemed non-responsible, and may not be considered for award of subsequent contract(s) by the Agencies.

1) Company Name \_\_\_\_\_

Contact Name \_\_\_\_\_

Mail Address \_\_\_\_\_  
\_\_\_\_\_

Telephone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
-----

2) Company Name \_\_\_\_\_

Contact Name \_\_\_\_\_

Mail Address \_\_\_\_\_  
\_\_\_\_\_

Telephone Number \_\_\_\_\_ Email Address \_\_\_\_\_  
\_\_\_\_\_

3) Company Name \_\_\_\_\_

Contact Name \_\_\_\_\_

Mail Address \_\_\_\_\_  
\_\_\_\_\_

Telephone Number \_\_\_\_\_ Email Address \_\_\_\_\_

Attachment E

PROPOSAL REPLY LABEL

SECURE TO THE OUTSIDE OF YOUR RESPONSE ENVELOPE.

INVITATION FOR PROPOSAL

NO. 18-008

Submission Date: **July 10, 2018**  
Time: **2:00 PM**

Water and Wastewater Chemicals

TO: Metropolitan Washington Council of  
Governments,  
c/o Jayme Hardy,  
Cooperative Purchasing Specialist  
777 North Capitol Street, NE, Suite 300  
Washington, DC 20002

## Attachment F

### Cooperative Rider Clause

The Metropolitan Washington Council of Governments (“COG”) is offering this solicitation to aggregate the public entity and non-profit purchasing volumes in the Maryland, Virginia and Washington, D.C. region (“region”).

A lead Participating Agency format is used to accomplish this work. COG is the Lead Participating Agency in this procurement and has included Cooperative Rider Clause in this solicitation indicating its willingness to allow other public entities to participate pursuant to the following Terms and Conditions:

#### 1. Terms

- 1.1 Participating entities, through their use of the Cooperative Rider Clause, agree to the terms and conditions of the resulting contract to the extent that they can be reasonably applied to the participating entity.
- 1.2 Participating entities may also negotiate additional terms and conditions specific to their local requirements upon mutual agreement between the parties.

#### 2. Other Conditions - Contract and Reporting

- 2.1 The contract resulting from this solicitation shall be governed by and "construed in accordance with the laws of the State/jurisdiction in which the participating entity officially is located;
- 2.2 To provide to COG contract usage reporting information, including but not limited to quantity, unit pricing and total volume of sales by entity, as well reporting other participating entities added on the contract, on demand and without further approval of contract participants;
- 2.3 Contract obligations rest solely with the participating entities only;
- 2.4 Significant changes in total contract value may result in further negotiations of contract pricing with the lead Participating Agency and participating entities.

In pricing and other conditions, Proposers are urged to consider the broad reach and appeal of Metropolitan Washington region with public and non-profit entities in this region.

A list of the participating members of the COG can be found at the following web links [www.COG.org/purchasing-and-Proposals/cooperative-purchasing/member-links/](http://www.COG.org/purchasing-and-Proposals/cooperative-purchasing/member-links/)

Other agencies in the region may be permitted to ride this contract, including, but not limited to, the Baltimore Metropolitan Council members. [www.baltometro.org/our-work/cooperative-purchasing/brcpc-representatives](http://www.baltometro.org/our-work/cooperative-purchasing/brcpc-representatives)

## Attachment G

### Terms and Conditions

This document sets out provisions generally applicable to Metropolitan Washington Council of Governments (“MWCOG”) Participating Agencies contracts. The provisions herein do not constitute a complete agreement, and must be appended to a document, executed by all parties, which identifies the specific work to be performed, compensation, term, incorporated attachments, and special conditions, if any. This document and the Contract are intended to be complementary and shall be construed accordingly. However, should there be a direct contradiction between the terms and conditions contained herein and the Contract, then the Contract shall govern and control those contradictory terms and conditions. As used herein, the term “MWCOG” includes MWCOG, its various members, agencies, employees or agents as may be appropriate. The term “Contract” shall include a document entitled “agreement” or any other title on a document that is denoting a contract.

Amendment. This Contract constitutes the entire agreement between the parties and all other communications prior to its execution, whether written or oral, with reference to the subject matter of this Contract are superseded by this Contract. No amendment to this Contract shall be binding unless in writing and signed by the parties.

Bankruptcy. Upon filing for any bankruptcy proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assignee for the benefit of creditors, the Contractor must notify MWCOG Participating Agencies immediately. Upon learning of the actions herein identified, MWCOG reserves the right at its sole discretion either to cancel the Contract or to affirm the Contract and hold the Contractor responsible for damages. The exercise of this right is in addition to any other rights MWCOG may have as provided in this agreement or by law.

Compliance with Law. The Contractor hereby represents and warrants that:

- A. It has the power and authority to enter into and perform the Contract, that the Contract, when executed and delivered, shall be a valid and binding obligation of Contractor, enforceable in accordance with its terms;
- B. Its performance under the Contract shall be in a good and workmanlike manner and in accordance with all applicable professional standards;
- C. It is qualified to do business in the jurisdictions covered by the Contract and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified;
- D. It is not in arrears in the payment of any obligations due and owing to any agency involved in this agreement, including but not limited to the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of this Contract;
- E. It shall comply with all federal, state and local laws, regulations, and ordinances applicable to its activities and obligations under this Contract; and
- F. It shall obtain, at its expense, all licenses, permits, insurance and governmental approvals, if any, necessary to the performance of its obligations under this Contract.

Contingent Fee Prohibition. The Contractor, architect or engineer (as applicable) warrants that it has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Contractor, architect or engineer, to solicit or secure this Contract, and that it has not paid or agreed to pay any person, partnership, corporation or other entity, other than a bona fide employee or agent, any commission, percentage, brokerage or contingent fee or other consideration contingent on the making of this Contract.

Counterparts. This Contract may be executed in several counterparts, each of which shall be an original, all of which shall constitute one and the same instrument.

Force Majeure. Neither MWCOG and/or its members nor Contractor shall be held responsible for delay or default caused by fire, riot, acts of God, declaration of emergency, or war where such cause was beyond, respectively, MWCOG’s and/or its members or Contractor’s reasonable control. MWCOG and/or its members and Contractor shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under this

Contract.

Governing Law. This Contract shall be governed by and construed in accordance with the laws of the Participating Agency's jurisdiction without regard to principles of conflicts of law.

Indemnification. The Contractor shall protect, hold free and harmless, defend and indemnify MWCOG and its members including their officers, agents and employees from all liability, penalties, costs, losses, damages, expenses, causes of action, claims or judgments (including attorney's fees) resulting from injury to, or death of, any person or damage to property of any kind, which injury, death or damage arises out of, or is in any way connected with the performance of the work or failure to perform its obligations under this Contract. This obligation of indemnification shall apply to any acts or omissions, negligent conduct, whether active or passive, including acts or omissions of Contractor's agents or employees; except that it shall not be applicable to injury, death or damage to the property arising from the sole negligence of MWCOG and/or members, their officers, agents and employees.

Independent Contractor.

- A. Contractor shall perform the work required by this Contract as an "Independent Contractor." Although MWCOG and/or members reserves the right to determine the delivery schedule for the work to be performed and to evaluate the quality of the completed performance, MWCOG and/or members cannot and will not control the means or manner of the Contractor's performance. The Contractor shall comply promptly with any requests by MWCOG and/or members relating to the emphasis or relative emphasis to be placed on various aspects of the work or to such other matters pertaining to the work under this Contract. Contractor is responsible for determining the appropriate means and manner of performing the work.
- B. Contractor represents and warrants that Contractor is not an employee of MWCOG and/or members, is not currently employed by the Federal Government, and is not an officer, employee or agent of MWCOG and/or members.
- C. Contractor shall be responsible for all federal or state taxes applicable to any compensation or payments paid to Contractor under this Contract. Contractor is not eligible for any federal Social Security, unemployment insurance, or workers' compensation benefits from compensation or payments paid to Contractor under this Contract.
- D. Contractor agrees to immediately provide MWCOG and/or members notice of any claim made against Contractor by any third party. Contractor also agrees not to assign to any third party, without MWCOG's written consent, any obligation of MWCOG to indemnify Contractor for any actions under this Contract.

Insurance Requirements.

- A. Contractor shall obtain, and at all times keep in effect, Commercial General Liability Insurance in the amounts listed below for its activities and operations. The insurance shall include coverage for personal injury, discrimination and civil rights violation claims. All such insurance shall name MWCOG, individual members, their employees, and agents as ADDITIONAL INSURED. A copy of the certificate of insurance shall be filed with MWCOG and/or members prior to the time any services are rendered. Contractor shall maintain coverage in the amount of \$1,000,000 per occurrence and \$2,000,000 general aggregate and \$500,000 for property damage. Coverage shall be written on an occurrence form.
- B. Contractor shall obtain, and at all times keep in effect, automobile insurance on all vehicles used in this Contract with MWCOG and/or members to protect Contractor against claims for damages resulting from bodily injury, including wrongful death, and property damage that may arise from the operations of any owned or hired automobiles used by Contractor in connection with the carrying out of this Contract. All such insurance shall name MWCOG and/or individual members, their employees, and agents as ADDITIONAL INSURED.

- C. Contractor shall, upon request, provide MWCOG and/or members with certification of Workers' Compensation Insurance, with employer's liability in the minimum amount required the governing jurisdiction's law in effect for each year of this Contract.
- D. All insurance policies shall have a minimum 30 days' notice of cancellation. Immediate written notice to MWCOG and members involved in the contract shall be required in the event of cancellation or restriction by the insurance company of any insurance policy referred to in this section.
- E. When insurance coverage is renewed, Contractor shall provide new certificates of insurance prior to expiration of current policies to all contracting agencies.

Nondiscrimination. A contractor who is the recipient of MWCOG and/or member funds, or who proposes to perform any work or furnish any goods under this Contract shall not discriminate against any worker, employee or applicant because of religion, race, sex, age, sexual orientation, physical or mental disability, or perceived disability. Contractor further agrees that this provision will be incorporated in all sub-contracts entered into in connection with this Contract.

Ownership of Documents and Materials.

- A. The Contractor agrees that all documents and materials, including but not limited to, reports, drawings, studies, specifications, estimates, maps, photographs, designs, graphics, mechanicals, artwork, and computations prepared by or for the Contractor under the terms of this Contract shall at any time during the performance of the services be made available to MWCOG and/or members upon request and shall become and remain the exclusive property of MWCOG and/or members upon termination or completion of the services. These jurisdictions shall have the right to use the same without restriction or limitation and without compensation to the Contractor other than that provided in this Contract. MWCOG and/or members shall be the owner for the purposes of copyright, patent or trademark registration.
- B. If the Contractor obtains or uses for purposes of this Contract, or subcontracts for, any design, device, material, or process covered by letters of patent for copyright, it shall provide an assignment to MWCOG and/or members of ownership for purposes of copyright, patent or trademark and of all right to possess and to use such design, device, material or process and a legally sufficient agreement with the patentee or owner, and a copy of such agreement shall be filed with MWCOG and/or members.
- C. The Contractor shall indemnify and save harmless MWCOG and/or members from any and all claims for infringement by reason of the use of any such patented design, device, materials, or process, or any trademark or copyright, and shall indemnify, protect and save harmless MWCOG and/or members, their officers, agents, and employees with respect to any claim. Action, costs or infringement, for royalties or user fees, arising out of purchase or use of materials, construction, supplies, equipment or services covered by this Contract.

Payments. Payments to the Contractor pursuant to this Contract shall be made no later than 30 days after MWCOG's and/or members receipt of a proper invoice from the Contractor.

Records. Contractor shall maintain all fiscal records relating to this Contract in accordance with generally accepted accounting principles. In addition, Contractor shall maintain any other records pertinent to this Contract in such a manner as to clearly document Contractor's performance hereunder. Contractor acknowledges and agrees that the MWCOG and/or members and their duly authorized representatives shall have access to such fiscal records and all other books, documents, papers, plans, and writings of the Contractor that are pertinent to this Contract. All such fiscal records, books, documents, papers, plans, and writing shall be retained by Contractor and kept accessible for a minimum of three (3) years, except as required longer by law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy, or litigation arising out of or related to this Contract, whichever date is later. All subcontracts shall also comply with these provisions.

Remedies.

- A. Corrections of errors, defect and omissions. Contractor agrees to perform the work as may be necessary to correct errors, defects, and omissions in the services required under this Contract, without undue delays and without cost to MWCOG and/or members. The acceptance of the work set forth herein by MWCOG and/or members shall not relieve the Contractor of the responsibility of subsequent corrections of such errors.
- B. Set Off. MWCOG and/or members may deduct from and set-off against any amounts due and payable to the Contractor any back-charges, penalties, or damages sustained by MWCOG and/or members, their agents, employees of recipients of its services, by virtue of any breach of this Contract by the Contractor or by virtue of the failure or refusal of the Contractor to perform the services or any part of the services in a satisfactory manner. Nothing herein shall be construed to relieve the Contractor of liability for additional costs resulting from a failure to satisfactorily perform the services.
- C. Cumulative. All rights and remedies of MWCOG/ members and Contractor shall be cumulative and may be exercised successively or concurrently. The foregoing is without limitation to or waiver of any other rights or remedies of the MWCOG and/or members by law.

Responsibility of Contractor.

- A. The Contractor shall perform the services with the standard of care, skill, and diligence normally provided by a Contractor in the performance of services similar the services hereunder.
- B. Notwithstanding any review, approval, acceptance or payment for the services by MWCOG, the Contractor shall be responsible for the professional and technical accuracy of its work, design, drawings, specifications and other materials furnished by the Contractor under this Contract.
- C. If the Contractor fails to perform the services, or any part of the services, in conformance with the standard set forth in subparagraph A above, it shall, if required by MWCOG and/or members, perform at its own expense and without additional cost to MWCOG and/or members, those services necessary for the correction of any deficiencies or damages resulting, in whole or in part, from the Contractor's failure. This obligation is in addition to and not in substitution for any other remedy available to MWCOG and/or members under the "Remedies" paragraph, or otherwise available by law.

Severability/Waiver. MWCOG and/or members and Contractor agree that, if any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid. The failure of either party to enforce any provision of this Contract shall not constitute a waiver by that party of that or any other provision of this Contract.

Subcontracting or Assignment. The benefits and obligations hereunder shall inure to and be binding upon the parties hereto and neither this Contract nor the services to be performed hereunder shall be subcontracted, or assigned or otherwise disposed of, either in whole or in part, except with the prior written consent of MWCOG and/or members. MWCOG and/or members have the right to withhold such consent for any reason MWCOG and/or members deem appropriate.

Survival. The terms, conditions, representations, and all warranties contained in this Contract shall survive the termination or expiration of this Contract.

Termination. If the Contractor fails to fulfill its obligations under the Contract properly and on time, or otherwise violates any provision of the Contract, MWCOG and/or members may terminate the Contract by written notice to the Contractor. The notice shall specify the acts or omissions relied upon as cause for termination. All finished or unfinished work provided by the Contractor shall, at MWCOG's and/or members option, become MWCOG's and/or member's property. MWCOG and/or members shall pay the Contractor

fair and equitable compensation for satisfactory performance prior to receipt of notice of termination, less the amount of damages caused by the Contractor's breach. If the damages are more than the compensation payable to the Contractor, the Contractor will remain liable after termination and MWCOG and/or members can affirmatively collect damages.

Termination of Contract for Convenience. The performance of work under this Contract may be terminated by MWCOG and/or members, in whole or in part, upon written notice to the Contractor, when MWCOG and/or members determines such termination is in the best interest of MWCOG and/or members. The termination for convenience is effective on the date specified in MWCOG's and/or members written notice. MWCOG and/or members will pay for all reasonable costs allocable to the Contract for work or costs incurred by the Contractor up to the date of termination. However, the Contractor shall not be reimbursed for any anticipatory profits that have not been earned up to the date of termination.

Termination of Multi-Year Contract. If MWCOG and/or members fail to appropriate funds or if funds are not otherwise made available for continued performance for any fiscal period of this Contract succeeding the first fiscal period, this Contract shall be cancelled automatically as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either MWCOG's and/or members rights or the Contractor's rights under any termination clause in this Contract. The effect of termination of the Contract hereunder will be to discharge both the Contractor and MWCOG and/or members from future performance of the Contract, but not from their rights and obligations existing at the time of termination. The Contractor shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the Contract. MWCOG and/or members shall notify the Contractor as soon as it has knowledge that funds may not be available for the continuation of this Contract for each succeeding fiscal period beyond the first.

Time is of the essence. Time is of the essence in Contractor's performance of each and every obligation and duty under this Contract.

Whole Contract. This Contract constitutes the complete and exclusive statement of the Contract between the parties relevant to the purpose described herein and supersedes all prior agreements or proposals, oral or written, and all other communication between the parties relating to the subject matter of this Contract.

*(Revised 8/22/2017)*