

Fairfax Water

MORIN BUILDING
8570 EXECUTIVE PARK AVENUE
FAIRFAX, VIRGINIA 22031

INVITATION FOR BIDS

Bid No:	14-16
Requirement:	Annual Water and Wastewater Chemical Requirements
Date Issued:	December 10, 2014
Pre-Bid Conference:	N/A
Deadline for Questions:	2:00 p.m., Wednesday, December 17, 2014
Bid Due Date:	2:00 p.m., Tuesday, December 30, 2014
IFB Delivery Location and Place of Bid Opening:	Procurement Department Fairfax Water 8570 Executive Park Avenue Fairfax, Virginia 22031
Procurement Contact:	Melanie Tillotson, CPPB Buyer II Telephone: (703) 289-6264 Facsimile: (703) 289-6262 E-Mail: procmt@fairfaxwater.org

IFB 14-16
Annual Water and Wastewater Chemical Requirements

1.	SUMMARY INFORMATION AND SUBMISSION OF BIDS	1
1.1	Introduction.....	1
1.2	Objective.....	1
1.3	Questions and Communications.....	1
1.4	Bid Opening and Instructions for Submitting Bids.....	1
1.5	Bid Submission Form.....	2
1.6	Proprietary Information.....	2
1.7	Addenda to the IFB.....	2
1.8	Receipt of Addenda.....	3
1.9	Late Bids.....	3
1.10	Contract Award.....	3
1.11	Public Notice of Award.....	3
1.12	Definitions.....	3
1.13	Term of Contract and Contract Renewal.....	4
2.	BID SPECIFICATIONS AND RELATED REQUIREMENTS	5
2.1	Chemical Specifications.....	5
2.2	Qualified Products.....	5
2.3	Spot Testing of Chemicals at Time of Delivery.....	5
2.4	Shipping.....	5
2.5	Weight at Time of Delivery.....	5
2.6	Virginia Department of Health Requirements.....	6
2.7	MSDS Reports.....	6
2.8	Estimated Quantities.....	6
2.9	Priority Customer.....	6
2.10	Warranty.....	6
2.11	References.....	7
2.12	Insurance Claims against Bidder.....	7
2.13	Delivery.....	7
2.14	Delivery Requirements.....	8
2.15	Inspection.....	9
2.16	Principals Only.....	9
3	STANDARD TERMS AND CONDITIONS	11
3.1	Authorization to do Business in Virginia.....	11
3.2	Annual Economic Price Adjustment.....	11
3.3	Anti-Discrimination.....	11
3.4	Antitrust.....	12
3.5	Arrearage.....	12
3.6	Assignment of Interest.....	13
3.7	Availability of Funds.....	13
3.8	Brand Names.....	13
3.9	Cancellation.....	14
3.10	Compliance with Laws, Regulations and Codes.....	14
3.11	Conflicting Terms and Conditions.....	14
3.12	Contract Changes / Change Orders.....	14
3.13	Contractor's Responsibilities.....	15
3.14	Debarment Status.....	16

**IFB 14-16
Annual Water and Wastewater Chemical Requirements**

3.15	Delivery	16
3.16	Duration of Bids	17
3.17	Ethics in Public Contracting	17
3.18	Examination of Records	17
3.19	Familiarity with Specifications	17
3.20	Formation of Contract.....	18
3.21	Governing Law; Venue; Waiver of Jury Trial.....	18
3.22	Incorporation by Reference	18
3.23	Indemnification and Responsibility for Claims and Liability	19
3.24	Insurance Requirements	19
3.25	No Waiver or Estoppel	21
3.26	Pass-through Price Increases and Decreases.....	21
3.27	Payment Clauses Required in All Contracts	22
3.28	Payment	22
3.29	Precedence of Terms.....	23
3.30	Price Firm Period.....	23
3.31	Price and Title	24
3.32	Purchase and Sale Transaction	24
3.33	Rider Clause	24
3.34	Taxes.....	24
3.35	Termination of Contract	24
3.36	Unit Prices Prevail	25
3.37	Virginia Freedom of Information Act.....	25
3.38	Warranty	25
4.	SPECIAL TERMS AND CONDITIONS.....	27
4.1	Delays.....	27
4.2	Force Majeure	27
4.3	Time Is Of The Essence	27
4.4	Contractor Replacement.....	28
4.5	Contractor's Compliance and Safety Program	28

Attachment 1
Attachment 2

References
Bid Submission Form

Appendix A
Appendix B

Chemical Requirements
Weights and Shipments, Quality and Content Chemical Requirements

IFB 14-16
Annual Water and Wastewater Chemical Requirements

SECTION 1

1. SUMMARY INFORMATION AND SUBMISSION OF BIDS

1.1 Introduction

The Fairfax County Water Authority, doing business as Fairfax Water (FW) was created under the Virginia Water and Waste Authorities Act pursuant to resolutions adopted by Fairfax County on September 26, 1957. Fairfax Water is managed by a ten member Board of Directors appointed for three-year terms by the Fairfax County Board of Supervisors.

1.2 Objective

The objective of this Invitation to Bid (IFB) is to award annual requirements contracts (i.e., Blanket Purchase Orders) for the Chemicals specified in Appendix A. Contracts awarded as a result of this solicitation will be renewable for up to four additional one-year periods (see Terms and Termination). This solicitation is a collaborative effort conducted on behalf of itself, Loudon Water, and Fairfax County (i.e., the “Members”).

1.3 Questions and Communications

All contact between prospective Bidders and FW with respect to this solicitation will be formally held at scheduled meetings or in writing through the Issuing Office. Questions and comments regarding the meaning or interpretation of any aspect of this solicitation must be submitted in writing to the Procurement Contact identified on the cover page to this solicitation and must be received on or before the deadline for submitting questions. Only written questions will be accepted. Questions and/or comments which are submitted after the deadline set forth on the cover page to this solicitation will not be answered.

FW shall respond to all timely questions and comments that are properly submitted and are deemed to address a matter that is relevant and substantive in nature within a reasonable period of time, in the form of a written Addendum that will be transmitted to all prospective Bidders at the addresses furnished to FW for such purpose. Oral communications between FW and any Bidder regarding the interpretation or meaning of any aspect of this IFB are not authorized and may not be relied upon for any purpose.

1.4 Bid Opening and Instructions for Submitting Bids

The deadline for submitting bids and the location for opening bids is shown on the cover sheet. Bids will be opened immediately following the deadline for submitting bids. Bids will be opened in accordance with the provisions of the Virginia Public Procurement Act.

All bids must be submitted in a sealed package(s), no other form of submission will be accepted (i.e., E-mail, Facsimile, etc.). Bid packages must be identified on the outside as follows:

IFB 14-16
Annual Water and Wastewater Chemical Requirements

From: _____	_____
Name of Bidder	Due Date
_____	_____
Street	IFB No.
_____	_____
City, State, Zip Code	IFB Title

Attn: Melanie Tillotson, CPPB

1.5 Bid Submission Form

Attachment 2 is the Bid Submission Form. It must be completed and signed by an agent who is fully authorized to bind the individual or organization submitting the offer to sell, to the terms, conditions and specifications contained herein as well as any addenda to this solicitation. Due to the complex nature of this solicitation, all Bidders must submit their bids on the bid submission form only. Failure to use the attached Bid Submission Form may result in the rejection of your bid.

1.6 Proprietary Information

- A. Except as provided herein or as otherwise set forth in §2.2-4342 of the Virginia Public Procurement Act (Va. Code Ann. §2.2-4300 *et seq.*, the "Act"), all proceedings, records, contracts and other public records relating to procurement transactions shall be open to inspection in accordance with the Virginia Freedom of Information Act (Va. Code Ann. §2.2-3700 *et seq.*, the "Virginia FOIA").
- B. A Bidder, Offeror or Contractor shall have the right to identify data or other materials submitted in connection with this procurement as trade secrets or proprietary information, which shall not be subject to inspection pursuant to either §2.2-4342 of the Act or the Virginia FOIA, by submitting to Fairfax Water prior to or at the time of submission of its proposal or bid a separate, written notice on its letterhead stationery setting forth the following: (i) a statement indicating that the Bidder, Offeror, or Contractor wishes to invoke the protections of this section; (ii) an identification of the data or other materials for which protection is sought; and (iii) a statement with regard to why protection is necessary.

1.7 Addenda to the IFB

- A. FW reserves the right to amend this solicitation at any time prior to the deadline for submitting Bids. If it becomes necessary to revise any part of this IFB, notice of the revision will be given in the form of an Addendum that will be provided to all prospective Bidders who are on record with FW as having received this solicitation. If, in the opinion of FW, the deadline for the submission of bids does not provide sufficient time for consideration of any Addendum, then such deadline may be extended at the discretion of FW.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

- B. It shall be the responsibility of each Bidder to contact the Purchasing Contact identified on the cover page to this solicitation prior to submission of a bid hereunder in order to determine whether any Addenda have been issued in connection with this procurement. Notwithstanding any provision to the contrary, the failure of any Bidder to receive any Addenda shall neither constitute grounds for withdrawal of its bid, nor relieve such Bidder from any responsibility for incorporating the provisions of any Addenda in its proposal.

1.8 Receipt of Addenda

Acknowledge receipt of each addendum by signing it and submitting it by the bid deadline.

1.9 Late Bids

Bids or unsolicited amendments to bids arriving after the bid submission deadline will not be considered.

1.10 Contract Award

FW reserves the unilateral right to award each chemical to the lowest responsible and responsive bidder, to make an aggregate award for a group of chemicals to the overall best Bidder for the designated group of chemicals, or any combination of chemicals and groups of chemicals in whatever manner best serve the needs of the Members.

1.11 Public Notice of Award

Public notice of award will be posted on the official FW web site (<http://www.fcwa.org/procurement/index.htm>).

1.12 Definitions

- A. **Acceptance** – means the point in time when FW Project Manager confirms in writing that the contract has been completed as contracted for and the Contractor is released from any further obligations. All remaining payments due the Contractor shall be approved for payment at this time.
- B. **Award** – means the decision by FW to execute a contract after all necessary approvals have been obtained.
- C. **Bid** – means the response by a Bidder to an Invitation for Bids issued by a procurement agency to obtain goods or labor.
- D. **Bidder** – means any person submitting a response to an IFB.
- E. **Contract** – means the formal acceptance of a bid by FW.
- F. **Contractor** – means the successful Bidder receiving a contract as a result of this solicitation.
- G. **Default** – means that the Contractor has failed to fulfill its contractual obligations properly and on time.
- H. **FW** – means Fairfax Water. The terms Owner and FW have the same meaning.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

- I. **Notice** – The term “Notice” or the requirement to notify means a written communication delivered in person, by facsimile, or by certified or registered mail to the individual or firm, or to an officer of the Contractor for whom it is intended.
- J. **Owner** – Fairfax County Water Authority.
- K. **Project** – The term “Project” means the same as the phrase “the Work.”
- L. **Project Manager** – means FW employee assigned to this project for purposes of oversight of the project. The Project Manager is responsible for all aspects of the contract (excluding contract modifications) after contract award, including but not limited to approving design changes, and authorizing payment for completed work.
- M. **Specifications** – The term “Specifications” refers to the written technical description of materials, equipment, construction systems, standards, and workmanship to be applied to the Work and certain administrative details applicable thereto.
- N. **Work** – The word “Work” shall include all material, labor equipment and tools, appliances, machinery, transportation, and appurtenances necessary to perform and complete the Contract, and any such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated or as required by industry practice, custom or usage to complete the project as proposed by the Bidder and accepted by FW.

1.13 Term of Contract and Contract Renewal

The Contracts awarded as a result of this solicitation will be effective for one-year beginning on the date of contract award. FW reserves the unilateral option to renew any and/or all contracts annually thereafter for up to four additional one-year periods, subject to the terms and conditions specified herein.

Notification of renewal shall be by the issuance of a renewal purchase order / contract. Failure to renew by the expiration date of the then current contract year will not automatically cancel the contract. FW may retroactively renew the contract at any time prior to the last day of the following contract year providing that FW has not formally canceled the contract(s).

END SECTION 1

IFB 14-16
Annual Water and Wastewater Chemical Requirements

SECTION 2

2. BID SPECIFICATIONS AND RELATED REQUIREMENTS

2.1 Chemical Specifications

The Calendar Year (CY) 2014 chemical specifications are contained in Appendix "A": Chemical Requirements.

2.2 Qualified Products

The Members have developed a Qualified Products List (QPL) for Polymers (Bid Item 15A-15C, Page 22 and 23 of Appendix A) and Polyaluminum Chloride (Bid Item 14, Page 20 and 21 of Appendix A). Only bids for products listed will be considered.

2.3 Spot Testing of Chemicals at Time of Delivery

The Members reserve the right to have chemical shipments tested by an independent laboratory. Failure of a shipment to comply with the bid specification will be sufficient reason for rejection of the shipment. Should a shipment be rejected, it will be returned to the Contractor, who shall pay all handling and shipping charges in both directions. Upon notice of rejection of a shipment, the Contractor shall furnish another shipment immediately, which shall comply in all respects with the prescribed analysis. In the event the Contractor is unable to promptly furnish the chemical of acceptable quality, the jurisdiction will obtain the chemical elsewhere. Any additional cost incurred by the jurisdiction will be charged to the Contractor either as a credit against an outstanding invoice or as an invoice for immediate reimbursement.

2.4 Shipping

Contractor shall ship chemicals in accordance with standard commercial practices and all Federal, State and local laws and regulations. Contractor shall be solely responsible for the shipment until delivery at the designated facility.

2.5 Weight at Time of Delivery

The Members reserve the right to weigh the shipments on their scales before and after delivery. In order to reduce the time and money required to resolve and adjust for minor weight differences, the net weight shown on the Contractor's weight ticket will be accepted unless it exceeds the net weight shown on the Members' ticket by more than 200 lbs. If the net weight shown on the Contractor's ticket exceeds the net weight on the Members ticket by more than 200lbs., the net weight shown on the Members ticket will be used.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

2.6 Virginia Department of Health Requirements

The Virginia Department of Health (VDH) requires that all containers are labeled in accordance with all applicable federal regulations. The Contractor is responsible for ensuring that state and federal regulatory compliance is maintained for any chemical and related container furnished under the contract. Failure to maintain compliance as specified in this paragraph or elsewhere in this IFB will result in termination of the contract.

2.7 MSDS Reports

Provide the following MSDS related documentation:

1. A copy of the most current MSDS Report for each chemical being bid by your firm must be included with your bid submission.
2. National Sanitation Foundation certification for the quoted chemical, by the manufacturer for drinking water, and
3. Chemical certificate of analysis for all chemicals

2.8 Estimated Quantities

The quantities specified herein are estimates based upon current consumption and projected demand for the next contract year, and shall not be construed to represent an amount which FW shall be obligated to purchase. The exact amounts ordered may be more or less subject to the actual needs of the Members. Bidders agree that the Participants will only be responsible for the amounts actually ordered.

2.9 Priority Customer

By submitting a bid in response to this solicitation, Bidder understands and acknowledges that the Members provide services that are essential to the health and welfare of the public. Failure of a Contractor to provide chemicals under any Contract issued pursuant to the terms, conditions, and specifications contained in this IFB may jeopardize Members' ability to provide timely services, which may affect the health and welfare of the public served by FW. In the event of product shortages at any level of the production to delivery chain, Bidder agrees and affirms that Members will be given the earliest possible notice and the highest priority for allocation of the item(s) listed herein. To the extent that the Contractor must prioritize and/or allocate delivery among its customers, the requirements of the Members will be honored before chemicals are provided to a customer with no obligations with regard to the public health and welfare. To the extent that chemicals are insufficient to meet the requirements of all of the clients who are responsible for the health and welfare of the public, the Chemicals will be allocated in a manner deemed to be fair and reasonable to all such clients.

2.10 Warranty

- A. By submitting a bid in response to this solicitation, Bidders warrant that chemicals provided as a result of this solicitation:

IFB 14-16
Annual Water and Wastewater Chemical Requirements

1. Conform to the most current NSF 60/61 and/or ANSI/AWWA standards for water and/or wastewater chemicals,
 2. Conform in all respects to the chemical specifications contained herein,
 3. Are suitable for a public drinking water supply and/or waste water treatment,
 4. Are free from adulterants or impurities of any kind, and
 5. In addition to any other warranties expressed or implied, the specific warranties of Merchantability and Fitness for a Particular Purpose apply to all orders placed as a result of this solicitation.
- B. If at any time, any chemical supplied by the vendor fails to conform to the specifications, then the Contractor shall, at no additional cost to the Member (s), promptly replace any such chemical. If the Contractor is unable to remedy such nonconformity during a time period consistent with the requirements, The Member (s) may undertake to remedy the nonconformity and in such a case the Contractor shall reimburse the Member (s) for any costs thereby incurred.

2.11 References

Bidders who have not provided the chemical(s) specified in this solicitation to FW or the Members within the past two years must submit three references for each chemical being bid from institutions of a similar size and scope of operation in the Mid-Atlantic area for which the chemicals being bid were provided within the past 12 months. References must be able to attest without reservation that the firm provided the same chemical being bid on in this solicitation without any significant problem of any kind, and at any time during the contract period. Two Reference Sheets (Attachment 1) are provided for your convenience.

2.12 Insurance Claims against Bidder

In addition to the mandatory insurance requirements listed in Subsection 3.24 (Insurance Requirements) and at the request of FW, the apparent low bidder shall submit a list of all insurance claims exceeding \$100,000 made against it within the past 12 months. Failure to provide this information within ten calendar days of request by FW may result in rejection of your bid.

2.13 Delivery

Each Member will establish its own delivery schedule based upon its own requirements and the Bidder's specified time to deliver after receipt of an order. Failure to honor delivery schedules (including partial deliveries) may result in damages to the participating Member. Members may at their own option and convenience cure late, partial, or missing deliveries in any manner that best resolves the shortage. The Contractor is liable for any and all costs incurred by a Member due to such failures by claiming Liquidated Damages as specified in Section 4 and also recovering any additional losses by deducting the outstanding amount from unpaid invoices, making a claim against a Performance Bond (if one is on file), submitting an invoice to the Contractor, or any other method that best suits the Member.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

2.14 Delivery Requirements

- A. Homeland Security Advisory System: If the Homeland Security Advisor System places the water waste water industry in Codes High or Severe, all deliveries shall be between the hours 7:30 a.m. and 2:00 p.m., Monday through Friday unless specially requested by the plant. As each delivery leaves the Contractor's yard, the Plant is to be advised as to the driver's name and trailer number and estimated arrival time. Upon arrival, the driver will be required to show photo ID and the trailer number will be checked and verified before delivery is allowed on site. Failure to follow these procedures may result in a refusal of the delivery at the Contractor's risk and expense.
- B. By submitting a bid in response to this solicitation, the Bidder guarantees delivery of chemicals within the delivery schedule. Failure to deliver within the time specified, or as amended in writing by the contracting Member, or failure to make replacements of rejected chemicals, shall constitute a breach of contract. In the event of such breach, the Member has the option to exercise its declare the Contractor in default and claim damages as provided in the Liquidated Damages section contained in Section three.
- C. Contractor shall comply with all regulations for tank/truck unloading as established by the US DOT, as well as any State and local requirements for tank/truck unloading.
- D. Chemical containers supplied by the Contractor shall be the sole responsibility of the Contractor at all times and in any circumstance. Members will not pay demurrage or other charges unless the Member specifically requests that the Contractor leave the container beyond the delivery date.
- E. The control number shall be provided to the Treatment Plant at the same time as the other required delivery information. A broken seal prior to acceptance of the batch by the utility may be cause for refusal of the delivery.
- F. All deliveries shall be accompanied by a receiving ticket under this contract that shall be supported by:
- Contractor's Name,
 - Purchase Order and Call Order Number (release number),
 - Date of Delivery and Date of Order,
 - Materials furnished,
 - Quantity, unit price and extension of each item, and total, in accordance with the contract, and
 - Name of authorized representative ordering the supplies.
- G. The Contractor's delivery ticket will be signed in duplicate by the Member's designated representative. One copy will be given to the employee signing for the delivery and the second copy will be retained by the Contractor.
- H. If required by a Member, the Contractor will call the plant prior to delivery and shall fax a copy of the driver's license, and a Chemical Shipping Itinerary sheet, which must include the manifest number and the above referenced information.
- I. Deliveries must be made by within the delivery time specified in the bid submission document. If a delay is anticipated, the Contractor must provide as much advanced notice as possible to the affected member(s). If delivery is not made on time, the jurisdiction shall have the right to procure the material on the open market. Any

IFB 14-16
Annual Water and Wastewater Chemical Requirements

additional costs incurred by the Member as a result of the Contractor's failure to provide timely delivery will be at the sole risk and expense of the Contractor.

- J. The Members reserve the unilateral right to reject any late or partial delivery. Any related costs shall be borne by the Contractor.
- K. Members have the right to refuse delivery if chemical packaging is damaged, appears to have been tampered with, or is deemed to be a safety hazard or potential safety hazard.
- L. Contractor(s) shall comply with all regulations for tank / truck routing and unloading as established by the US DOT, as well as any State and local requirements for tank / truck unloading.
- M. All chemicals shall be delivered F.O.B. delivered. All cost for shipping, handling, insurance and related delivery charges must be included in the unit price for each bid item.
- N. Delivery Free period shall be 5 hours for Powdered Activated Carbon and 2 hours for all other chemicals.
- O. Hours of delivery will be determined by each jurisdiction.
- P. Regardless of the reason, the Contractor shall be solely responsible for spills, and or delivering chemicals to the wrong storage locations/tanks. Any and all cost associated with remediation, including, but not limited to Hazmat, site cleanup, and tank cleaning etc., shall be the responsibility of the contractor.
- Q. Contractors shall provide and maintain any and all special tools required to load or dispense chemicals. If required, contractor shall provide pre-set torque wrenches; and will be solely responsible for damages, leaks, etc. caused by malfunctioning or improperly set tools.
- R. Delivery vehicles must be in good working order and compliant with all Federal, State, and local transportation laws and regulations. If Contractor intends to subcontract delivery to a third party carrier, the Contractor must submit the name of the carrier and a complete list of all state and interstate violations for which the subcontractor, its drivers and or its vehicles have been cited within the past 2 years.

2.15 Inspection

The Members reserve the right to inspect and test any chemical at any time during or after delivery. No inspection, test, approval or acceptance of any Commodity shall relieve Contractor from liability for defects or other failure to satisfy the requirements set forth in the Contract Documents.

2.16 Principals Only

The use of Sub-Contractors, agents, etc. is prohibited. Fairfax Water will enter into contracts with bidders whose primary business is the sale of the chemical (s) for which the bidder is submitting a bid.

END SECTION 2

IFB 14-16
Annual Water and Wastewater Chemical Requirements

THIS PAGE INTENTIONALLY LEFT BLANK

IFB 14-16
Annual Water and Wastewater Chemical Requirements

SECTION 3

3 STANDARD TERMS AND CONDITIONS

3.1 Authorization to do Business in Virginia

Each bidder that is organized or authorized to transact business in the Commonwealth of Virginia pursuant to Title 13.1 or Title 50 of the Virginia Code shall include with its bid the identification number issued to it by the Virginia State Corporation Commission. Any bidder that is not authorized to transact business in Virginia as a foreign entity under Title 13.1 or title 50 of the Virginia Code or as otherwise required by law shall include in its bid a statement describing why the bidder is not required to be so authorized.

3.2 Annual Economic Price Adjustment

- A. In the case of annually renewable contracts, the Contractors may submit a request for contract price increases once annually for each renewal year. Economic increases shall be limited to the increase specified in the Bureau of Labor Statistics (BLS) Producer Price Index – Not Seasonally Adjusted (“PPI-NSA”) for Chemicals and Allied Products (Series id WPU06), for the 12 month period ending 90 days prior to the end of the then current contract year. Request for contract price increases must be submitted at least 30 days prior to the end of the then contract year. This PPI may be replaced by any other single PPI providing that the substitute PPI constitutes the greatest component of the contracted chemical. (e.g. Series id – WPU061302T1 – Sulfuric Acid). Multiple price indexes will not be considered for the same bid item. Bidder may specify a different index for different bid items based on the conditions identified above. Series ID WPU06 will be used for the duration of the contract if the Bidder does not specify a specific PPI on the Bid Submission Form. If the specified PPI is discontinued by BLS during the duration of the contract, bidder must submit request for change or revert to WPU06.
- B. Negative BLS index: If the agreed upon index is a negative number the contractor shall immediately reduce contract rates by the same amount for the duration of the contract year.
- C. By submission of a bid, Contractors agree and accept the terms of items A and B above for the duration of the contract.

3.3 Anti-Discrimination

By submitting their bids, Bidders certify to FW that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and §11-51 of the Virginia Public Procurement Act.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

- A. During the performance of the contract, the Contractor agrees as follows:
1. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or disabilities, except where religion, sex or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.
 3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
- B. The Contractor will include the provisions above in every subcontract or purchase order so that the provisions will be binding upon each subcontractor or vendor.
- C. Fairfax Water does not discriminate against faith-based organizations on the basis of the organization's religious character, or impose conditions that (a) restrict the religious character of the faith-based organization, except as provided by law, or (b) impair, diminish, or discourage the exercise of religious freedom by the recipients of such goods, services, or disbursements.

3.4 Antitrust

By entering into a contract, the Contractor conveys, sells, assigns, and transfers to FW all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by FW.

3.5 Arrearage

By submitting a Bid in response to this solicitation, the individual or firm submitting the bid shall be deemed to represent that it is not in arrears in the payment of any obligation due and owing FW, the Commonwealth of Virginia, or any public body in the Commonwealth of Virginia, including but not limited to any obligation to pay taxes and/or employee benefits. Bidder further agrees that it shall make diligent efforts to avoid becoming in arrears during the Term of any Contract awarded hereunder.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

3.6 Assignment of Interest

The Contractor shall not assign any interest in any resulting Contract and shall not transfer any interest in the same without prior written consent of FW, which FW shall be under no obligation to grant.

3.7 Availability of Funds

It is understood and agreed between the parties herein that FW shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

3.8 Brand Names

- A. Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict Bidders to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article that FW, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. Each Bidder is responsible to clearly identify the product being offered (by manufacturer's name, model, part number, etc.) and to provide sufficient descriptive literature, catalog cuts and technical detail to enable FW to determine if the product offered meets the requirements of the solicitation. Failure to furnish adequate data for evaluation purposes may result in declaring an offer non-responsive. Unless the Bidder clearly indicates that the product offered is an "equal" product, such bid will be considered to offer the brand name product specified in this solicitation.
- B. For purposes of this solicitation and any contract that may result here from, the Members designation of any one or more manufacturers and/or suppliers as "preapproved" or "acceptable" shall signify only that such manufacturers and/or suppliers previously have submitted work samples or the like to Fairfax Water or the Members which satisfied Fairfax Water's or the Member's requirements. Fairfax Water's and the Members designation of any one or more manufacturers and/or suppliers as "preapproved" or "acceptable" shall in no event be deemed or construed to be a representation or warranty on the part of Fairfax Water or the Members of any such manufacturer's or supplier's capability or capacity (in terms of financial wherewithal, personnel and equipment availability, managerial ability or otherwise) of performing any of the requirements of this solicitation in accordance with the terms and conditions hereof. Each Bidder shall conduct such independent investigation into the qualifications, experience and abilities of its selected manufacturers and suppliers as it deems appropriate under the circumstances.
- C. "Or Equal" bids will not be accepted for those chemicals on Fairfax Water's QPL.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

3.9 Cancellation

Fairfax Water may cancel this solicitation at any time and for any reason prior to contract award.

3.10 Compliance with Laws, Regulations and Codes

The Offeror hereby represents and warrants that:

- A. It is qualified and properly licensed to do business in the Commonwealth of Virginia and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified;
- B. It is not in arrears with respect to the payment of any monies due and owing FW, the Commonwealth of Virginia, or any department or unit thereof, 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;
- C. It shall comply with all federal, State and local laws, regulations, and ordinances applicable to its activities and obligations under this Contract; and
- D. It shall obtain at its expense, all licenses, permits, insurance, and governmental approval, if any, necessary to the performance of its obligations under this Contract.

3.11 Conflicting Terms and Conditions

By submitting a bid in response to this solicitation, the Bidder agrees that the Terms, Conditions and Specifications contained herein shall control any contract arising from an award of this solicitation. Any proposed terms and conditions, any/or contract form that the Bidder proposes to use, shall be submitted as part of the Bidder's offer to sell. Terms and conditions submitted by a Bidder after the deadline for submitting offers to sell will be rejected and the Bidder will be held to the terms and conditions contained herein. Contract award is contingent on the Bidder and FW agreeing on mutually acceptable terms and conditions. Failure to do so will automatically disqualify the Bidder from contract award. To the extent that a conflict arises or is found to exist between the Bidder's offer to sell and this solicitation, including any addenda thereto, the terms, conditions and specifications contained in this solicitation and any addenda thereto shall in all cases prevail.

3.12 Contract Changes / Change Orders

- A. No verbal agreement or conversation with any officer, agent or employee of FW either before or after the execution of any Contract resulting from this solicitation or follow-on negotiations, shall affect or modify any of the terms, conditions, specifications, or obligations contained in the solicitation, or resulting Contract. No alterations to the terms and conditions of the Contract shall be valid or binding upon FW unless made in writing and signed by the purchasing contact identified on the cover page. Contract changes shall be in writing, and shall be on official FW Purchasing Department letterhead. In any event and in all circumstances, the Contractor shall be solely liable and responsible for any Contract changes, deviations, etc., made without

IFB 14-16
Annual Water and Wastewater Chemical Requirements

first receiving written authorization to deviate from the Contract by the FW Project Manager.

- B. Changes can be made to the contract in any of the following ways:
1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
 2. FW may order changes within the general scope of the contract at any time by Notice to the Contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The Contractor shall comply with the notice upon receipt. The Contractor shall be compensated for any additional costs incurred as the result of such order and shall give FW a credit for any savings. Said compensation shall be determined by one of the following methods:
 - a. By mutual agreement between the parties in writing; or
 - b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the Contractor accounts for the number of units of work performed, subject to Fairfax Water's right to audit the Contractor's records and/or to determine the correct number of units independently; or
 - c. By ordering the Contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The Contractor shall present FW with all vouchers and records of expenses incurred and savings realized. FW shall have the right to audit the records of the Contractor, as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by Notice to the Purchasing Department. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the Contractor from promptly complying with the changes ordered by FW or with the performance of the contract generally.

3.13 Contractor's Responsibilities

- A. The Contractor shall be responsible for all products and/or services as required by this IFB. The use of subcontractors is prohibited unless:
1. A request to include a subcontractor is included in the bid and,
 2. The Bidder receives written approval to use a subcontractor prior to, or as part of the formal contract between the parties.
- B. Even when properly authorized by FW, the use of a subcontractor does not relieve the Contractor of liability under the contract.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

- C. The Contractor, at its sole expense, shall be responsible for damage to FW and non-FW property as a result of its failure, or its subcontractor's failure to protect such facilities and utilities.
- D. The Contractor, at its sole expense, shall immediately repair or replace FW property damaged by (or caused by) the Contractor or its Subcontractor(s). Replacements will be of equal or better quality than the property damaged property, and all such work must be approved by FW Project Manager.

3.14 Debarment Status

By submitting a Bid in response to this solicitation, each Bidder certifies that it is not currently debarred by the federal government, the Commonwealth of Virginia, or any agency or department thereof from submitting a bid or proposal in connection with any procurement project and that it is not an agent of any person or entity that currently is so debarred.

3.15 Delivery

In the case of solicitations that require delivery to FW:

- A. By submitting a bid in response to this solicitation, the Bidder guarantees delivery of contract items within the timeframe specified herein or as indicated in the bidders bid submission form. Failure to deliver within the time specified, or as amended in writing by FW, or failure to make replacements of rejected Contract items, shall constitute a breach of contract and may be grounds for a declaration of default in addition to any other remedies FW may be entitled to.
- B. Deliveries must be made by within the delivery time specified in the bid submission document. If a delay is anticipated, the Contractor must provide as much advanced notice as possible to FW. Failure to honor a delivery schedule may result in damages to FW. The Contractor is liable for any and all costs incurred by FW due to such failures.
- C. Homeland Security Advisory System: If the Homeland Security Advisor System places the water / waste water industry in Codes High or Severe, all deliveries shall be between the hours 7:30 a.m. and 2:00 p.m., Monday through Friday unless specially requested by the plant. As each delivery leaves the Contractor's yard, the Plant is to be advised as to the driver's name and trailer number and estimated arrival time. Upon arrival, the driver will be required to show photo ID and the trailer number will be checked and verified before delivery is allowed on site. Failure to follow these procedures may result in a refusal of the delivery at the Contractor's risk and expense.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

3.16 Duration of Bids

Bids shall be valid for a minimum of 90 days following the deadline for submitting bids. If an award is not made during that period, all bids shall be automatically extended for another 90 days. Bids will be automatically renewed until such time as either an award is made or proper notice is given to FW of Bidder's intent to withdraw its bid. Bids may only be withdrawn by submitting written notice at least seven days before the expiration of the then current 90-day period.

3.17 Ethics in Public Contracting

Contractor hereby certifies that it has familiarized itself with Article 4 of Title 11 of the Virginia Public Procurement Act, Section 11-72 through 80, Virginia Code Annotated, and that all amounts received by it, pursuant to a contract resulting from this solicitation, are proper and in accordance therewith.

3.18 Examination of Records

Bidder agrees that in any resulting contract, either FW or its duly authorized representative shall have access to and the right to examine and copy any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to any resulting contract. This obligation shall expire five years after the final payment for the final service performed as a result of any and all contract(s) awarded pursuant to this solicitation, or until audited by FW, whichever is sooner. Contractor will provide reasonable access to any and all necessary documents and upon demand provide copies of documents if so required by FW or its representative(s). FW will reimburse the Contractor for any reasonable expenses it incurs as a result of such a request.

3.19 Familiarity with Specifications

Each Bidder shall bear responsibility for thoroughly examining this solicitation in its entirety. In the event that Bidder has any questions or comments regarding the proper meaning or intent of any aspect of this solicitation, then such Bidder shall submit all such questions and comments in writing to the Procurement Contact identified on the cover sheet of this solicitation.

The submission by a Bidder of a Bid in response to this solicitation shall be deemed to constitute a representation on the part of such Bidder that it has thoroughly examined this solicitation and has submitted any and all questions and comments it may have regarding the meaning or interpretation of this solicitation to Fairfax Water in the manner prescribed herein.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

3.20 Formation of Contract

- A. The words “Contract” and “Purchase Order” are used interchangeably unless the context otherwise plainly requires. The documents comprising the Contract shall be accorded the following order of precedence:
1. Any Change Orders;
 2. All Purchase Orders;
 3. Any Addenda to the IFB;
 4. This IFB (including all Appendices and Attachments hereto); and
 5. The Bidder’s completed Bid Tabulation Form (including any drawings and submittals).
- B. The contract to be entered into as a result of this IFB shall be by and between the Bidder as Contractor and FW. It shall include the following items, which are listed in order of precedence:
1. The fully executed contract between the parties, or FW Purchase Order,
 2. The IFB and any Addenda to the IFB,
 3. The Bidder’s response to the IFB (including any drawings and submittals), and
 4. All correspondence between the parties regarding this IFB.
- C. Anything called for by one of the contract documents and not called for by the others shall be of like effect as if required or called for by all, except that a provision clearly designed to negate or alter a provision contained in one or more of the other contract documents shall have the intended effect.

3.21 Governing Law; Venue; Waiver of Jury Trial

Notwithstanding any provision to the contrary, this solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia. Any dispute arising hereunder which is not otherwise resolved by the parties shall be resolved by a court of competent jurisdiction in the Commonwealth of Virginia. The Contractor and FW hereby waive any right such party may have to a trial by jury in connection with any such litigation.

3.22 Incorporation by Reference

This solicitation is issued in accordance with, and controlled by, the Virginia Public Procurement Act (VPPA), which is incorporated into and made part of the solicitation. By submitting a bid in response to this solicitation, all Bidders acknowledge the VPPA and agree to be bound by it. A copy of the VPPA is available for inspection at the Purchasing Department at FW. It is also available at the Virginia Department of General Services, Department of Purchases and Supply Website:

<http://www.eva.virginia.gov/pages/eva-vppa.htm>

IFB 14-16
Annual Water and Wastewater Chemical Requirements

3.23 Indemnification and Responsibility for Claims and Liability

With respect to any contract that results from this solicitation, Bidder is bound by the following:

- A. The Contractor shall indemnify, save harmless and defend FW, or any employee of FW, against liability for any suits, actions, or claims of any character whatsoever arising from or relating to the performance of the Contractor or its subcontractors under this contract.
- B. FW has no obligation to provide legal counsel or defense, or pay attorney's fees to the Contractor or its subcontractors in the event that a suit or action of any character is brought by any person not party to the contract, against the Contractor or its subcontractors as a result of or relating to the Contractor's obligations under this contract.
- C. FW has no obligation for the payment of any judgments or the settlement of any claims against the Contractor or its subcontractors as a result of or relating to the Contractor's obligations under this contract.
- D. The Contractor shall pay all royalties and license fees necessary for performance of the contract. The Contractor shall defend all suits or claims for infringement of any patent rights or other proprietary rights arising from or related to performance of the resulting contract and shall save FW harmless from any and all loss, including Attorneys' fees arising out of any such claim.

3.24 Insurance Requirements

- A. In addition to the mandatory insurance requirements listed in this Section and, at the request of FW, any Bidder may be required to provide a list of all insurance claims made against it within the past 36 months. FW reserves the right to reject any bid if in FW's opinion the amount or number of claims is deemed to be excessive. An Bidder's failure to comply with this requirement may result in rejection of its bid. If no claims have been made, then the Bidder shall so state in its bid. Fairfax Water may require such information from the Contractor as it deems necessary to assess the Contractor's financial ability to pay any deductibles with respect to the insurance policies required hereunder.
- B. Before commencing the work, the Contractor shall procure and maintain at its own expense, minimum insurance in forms and with insurance companies acceptable to FW to cover loss or liability arising out of the Work. All insurance policies must be underwritten by insurers authorized to conduct business within the Commonwealth of Virginia and must have a Best's rating of at least A- and a financial size of class VIII or better in the latest edition of Best's Insurance Reports.

IFB 14-16

Annual Water and Wastewater Chemical Requirements

- C. The Contractor shall immediately notify FW of any claim or suit made or filed against the Contractor or its subcontractors regarding any matter resulting from or related to the Contractor's obligations under the contract. If such a claim or suit is brought, the Contractor will cooperate, assist, and consult with FW in the defense or investigation of any suit or action made or filed against FW as a result of or relating to the Contractor's performance under this contract.
- D. With the exception of Workers' Compensation and Employers' Liability Insurance, all additional insurance policies specified herein shall name FW as an additional insured with regard to work performed under any subsequent Contract
- E. The Contractor will provide FW with copies of certificates of insurance coverage and proof of payment of all premiums. Each certificate of insurance must include: (a) an endorsement from the insurer that certifies that the Contractor maintains the referenced policy in full force and effect; (b) where applicable, a statement indicating that FW is included as an additional insured; and (c) a provision requiring that not less than 30 days written notice will be given to FW before any policy or coverage is canceled or modified in any material respect. Without limiting the requirements set forth above, the insurance coverages will include a minimum of:
1. Workers' Compensation and Employers' Liability Insurance: Statutory requirements and benefits as required by the Commonwealth of Virginia; and
 2. Required Commercial General Liability Insurance: This insurance must be written on an "occurrence" basis and shall be endorsed to include FW as an additional insured and shall provide at a minimum the following:

◆ General Aggregate Limit (Other than Products-Completed Operations)	\$1,000,000
◆ Products-Completed Operations Aggregate Limit	\$ 500,000
◆ Personal & Advertising Injury Limit	\$ 500,000
◆ Each Occurrence Limit	\$ 500,000
For Construction Contracts:	
◆ Directors & Officers – Errors & Omissions	\$2,000,000
- F. Business Automobile Liability Insurance: This insurance coverage must extend to any motor vehicles or other motorized equipment regardless of whether it is owned, hired, or non-owned and must cover Bodily Injury and Property Damage with a combined single limit of at least \$500,000 each accident. This insurance must be written in comprehensive form and must protect the Contractor and FW against claims for injuries to members of the public and/or damage to the property of others arising from the Contractor's use of motor vehicles or other equipment and must cover both on-site and off-site operations.
- G. Nothing contained herein will be deemed to operate as a waiver of FW's sovereign immunity under the law.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

3.25 No Waiver or Estoppel

Neither the inspection by FW nor any of its employees, nor any payment of money, nor payment for, nor acceptance of any Commodity by FW, nor any extension of time shall operate as a waiver of any provision of this Contract, or of any power herein reserved to the Owner or of any right to damage herein provided. No waiver of any breach of this Contract shall be held to be a waiver of any other subsequent breach. All remedies provided in this Contract to FW shall be construed as cumulative and shall be in addition to each and every other remedy herein provided. Neither FW, nor any officer, member, employee, or authorized representative of FW, will be bound, precluded, or estopped by any action, determination, decision, acceptance, return, certificate, or payment made or given under or in connection with the Contract by any officer, employee, member or authorized representative of the Owner, at any time either before or after final completion and acceptance of the Work and payment therefore from: (a) showing the true and correct classification, amount, quality, or character of the Commodities delivered, or that any determination, decision, acceptance, return certificate or payment was incorrect or was improperly made in any respect, or that the Commodities or any part thereof do not in fact conform to the requirements of the Contract; (b) demanding and recovering from the Contractor any overpayment made to the Contractor or such damages as FW may sustain by reason of the Contractor's failure to comply with the requirements of the Contract; or (c) both of the foregoing clauses (a) and (b).

3.26 Pass-through Price Increases and Decreases

For annually renewable contracts:

- A. Increases: FW recognizes that the Contractor's sources of supply and transportation may pass onto the Contractor unanticipated and significant price increases. FW will consider requests by the Contractor to allow "pass-through" price increases when accompanied with sufficient proof. Only the Contractor's direct supplier's price increases will be considered. FW reserves the right to accept or reject all such requests. FW will not allow price increases that are greater than the amount passed on to the Contractor, or for a period outside of the then current contract year.
- B. Decreases:
 - 1. Pass through price increases shall cease at the end of the then current contract year and contract pricing will return to the pre-pass through rate. The contractor will be eligible for and only upon request, the annual economic price increase as defined in subsection 3.3 above.
 - 2. Prior to the end of the then current contract year, the pass through increase shall be reduced or eliminated when and as the cause of the increase is reduced or eliminated.
- C. Pass through price increases will not be a substitute for poor planning by the Contractor. Pass through increase will not be allowed for the first six months of any

IFB 14-16
Annual Water and Wastewater Chemical Requirements

contract year. Price increases will be effective upon the date such a request is received in writing; and will not be made retroactive.

3.27 Payment Clauses Required in All Contracts

Section § 2.2-4352 of the Virginia Public Procurement Act requires the following:

A. That any contract awarded by FW include the following clauses:

1. The Contractor shall take one of the two following actions within seven days after receipt of amounts paid to the contractor by FW for work performed by any subcontractor(s) under the contract:
 - a. The Contractor shall pay its subcontractor(s) for the proportionate share of the total payment received from FW attributable to the work performed by the subcontractor under that contract; or
 - b. Notify FW and any subcontractor(s), in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.
 2. Offerors shall include in their offer submissions either: (i) if an individual contractor, their social security numbers; and (ii) proprietorships, partnerships, and corporations to provide their federal employer identification numbers.
 3. The contractor shall pay interest to the subcontractor(s) on all amounts owed by the Contractor that remain unpaid after seven days following receipt by the Contractor of payment from FW for work performed by the subcontractor under the contract, except for amounts withheld as allowed in subdivision 1.
 4. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent per month.
- B. The contractor shall include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor.
- C. A contractor's obligation to pay an interest charge to a subcontractor pursuant to the payment clause in this section shall not be construed to be an obligation of FW. A contract modification shall not be made for the purpose of providing reimbursement for the interest charge. A cost reimbursement claim shall not include any amount for reimbursement for the interest charge.

3.28 Payment

- A. Invoices: All invoices are to be sent directly to FW Accounts Payable department by mail, fax, or e-mail. Invoices shall include the FW Purchase Order / Contract number and the contractor's FEIN. Invoices are not to be sent to the contract Project Manager, or other departmental reps. Failure to comply may result in late payments for which FW will not be liable.

IFB 14-16

Annual Water and Wastewater Chemical Requirements

- B. Terms: All payments will be Net 30 from the date of receipt of a valid invoice at FW Finance Department. Payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.
- C. Invoices: The Contractor shall submit invoices for items ordered, delivered and accepted, directly to the Finance Department, to the attention of Accounts Payable. Invoices shall show FW Purchase Order or contract number and are subject to review and approval by FW Project Manager
- D. Partial Payments: Requests for partial payments or advanced payments must be submitted as part of the Price Bid along with a justification. FW reserves the right to accept, reject or negotiate requests for partial payments. If the request is rejected, the Bidder must waive the requirement in order to remain in consideration.
- E. Refunds: If the Contractor is declared to be in default, FW will be eligible for a full and immediate refund for all payments made to the Contractor. Partial Payments: Requests for partial payments or advanced payments must be submitted as part of the Price Offer along with a justification. FW reserves the right to accept, reject or negotiate requests for partial payments. If the request is rejected, the Offeror must waive the requirement in order to remain in consideration.
- F. Unreasonable Charges: Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, final payment is contingent on a determination of reasonableness with respect to all invoiced charges. Charges that appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, FW shall promptly notify the Contractor, in writing, as to those charges that it considers unreasonable and the basis for the determination.

3.29 Precedence of Terms

These General Terms and Conditions shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

3.30 Price Firm Period

Bid pricing shall be firm and fixed as originally offered and accepted for the first 12 months of the contract.

IFB 14-16
Annual Water and Wastewater Chemical Requirements

3.31 Price and Title

All prices are for Commodities delivered F.O.B. the facility set forth on the Purchase Order and shall represent the entire cost to FW. Title for such Commodities shall pass to FW upon receipt and acceptance thereof at FW's designated facility.

3.32 Purchase and Sale Transaction

Any transaction for the purchase and sale of any Commodity shall be effected by FW's issuance to the Contractor of a Purchase Order, in which event the Contractor covenants and agrees to furnish all Commodities described therein in strict accordance with the terms and conditions of such Purchase Order and the other documents that together constitute the Contract.

3.33 Rider Clause

Subject to the mutual agreement between the parties, any contract awarded on the basis of this solicitation may be used by any public entity (to include jurisdictions comprising the Metropolitan Washington Council of Governments), to enter into a contract for the services described and defined herein. For single purchases, the contract may be used for up to 12 months from the actual date of contract award. For multi-year contracts, the contract may be used throughout the effective period of the contract. Contracts awarded as a result of this solicitation will be subject to these terms and conditions, and/or such terms and conditions as may be required by the controlling body for the public agency using the contract. Pricing shall be as offered by the successful Offeror and subsequently accepted by FW. However, to the extent that transportation cost vary, the contractor and the public entity may negotiate a markup or discount to reflect the true cost of transportation.

3.34 Taxes

FW is exempt from Federal Excise Taxes, Virginia State Sales and Use Taxes, and the District of Columbia Sales Taxes and Transportation Taxes. FW's tax identification number is 54-6025290.

3.35 Termination of Contract

- A. For Cause. In the event that the Contractor: (1) fails to deliver any Commodity or Service in accordance with the time period established therefore in the Contract; or (2) fails to furnish any Commodity or Service which conforms in all respects to the requirements of the Contract; then FW, without prejudice to any other rights or remedies it may have at law or in equity (including its right to seek damages from the Contractor), shall have the right to terminate the Contract and any outstanding Purchase Orders by issuing a written notice of termination to the Contractor. Such notice of termination shall describe in reasonable detail the grounds for the termination and shall take effect immediately upon receipt by the Contractor.

IFB 14-16

Annual Water and Wastewater Chemical Requirements

If, after issuance of a notice of termination under this Section it is determined for any reason that cause for such termination did not exist, then the rights and obligations of the parties shall be the same as if the notice of termination had been delivered under the provisions of subsection B (termination for convenience) hereof; provided, however, that the Contractor in such event shall be deemed to have received seven days prior written notice of such termination. Any compensation due the Contractor pursuant to subsection B shall be offset by the cost to FW of remedying the default by the Contractor. The Contractor shall in no event be entitled to receive any consequential damages or any anticipated profits with respect to Commodities not yet furnished to, and accepted by, FW as of the effective date of any such termination.

- B. For Convenience. FW shall have the right to terminate the Contract and/or any outstanding Purchase Orders issued hereunder at its own convenience for any reason by giving seven business days prior written notice of termination to the Contractor. In such event, the Contractor shall be paid an amount equal to the actual cost of any Commodity delivered to, and accepted by, FW and the actual cost of any equipment, goods or materials ordered by the Contractor hereunder in good faith which could not be canceled, less the salvage value thereof, provided sufficient substantiation is furnished to FW. Any subcontract entered into by the Contractor in connection with the transactions contemplated hereby shall contain a similar termination provision for the benefit of the Contractor and FW. The Contractor shall in no event be entitled to receive anticipated profits on any Commodities not yet furnished to and accepted by FW as of the effective date of any such termination.

3.36 Unit Prices Prevail

In the event that there is a mathematical error on the summary sheet, the unit price for each item shall prevail. All costs to provide the goods and/or services specified in this solicitation shall be shown on the attached bid summary sheet. If there are additional costs to provide the goods and/or services specified herein either list them on the attached bid summary sheet or attach an additional sheet to it. Line items left blank will be interpreted as at no cost to FW.

3.37 Virginia Freedom of Information Act

Except as provided herein, all proceedings, records, contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, any interested person, firm, or corporation, in accordance with the Virginia Freedom of Information Act.

3.38 Warranty

- A. The contractor warrants that, unless otherwise specified, all materials and equipment incorporated in the work under the contract shall be new, in first class condition, and in accordance with the contract documents. The contractor further warrants that all

IFB 14-16

Annual Water and Wastewater Chemical Requirements

workmanship shall be of the highest quality and in accordance with contract documents and shall be performed by persons qualified at their respective trades.

- B. Materials and equipment shall be fully guaranteed against defects in material and workmanship for a period of 12 months following date of final acceptance. Should any defect be noted by the FW, the Project Manager will notify the contractor of such defect or non-conformance. Notification will state either (1) that the contractor shall replace or correct, or (2) FW does not require replacement or correction, but an equitable adjustment to the contract price will be negotiated. If the contractor is required to correct or replace, it shall be at no cost to FW and shall be subject to all provisions of this clause to the same extent as materials initially delivered. If the contractor fails or refuses to replace or correct the deficiency, the office issuing the purchase order may have the materials corrected or replaced with similar items and charge the contractor the costs occasioned thereby or obtain an equitable adjustment in the contract price.
- C. Work not conforming to these warranties shall be considered defective.
- D. This warranty of materials and workmanship is separate and independent from and in addition to any of the contractor's other guarantees or obligations in this contract.

NOTE: Any implied warranties, including but not limited to the warranty for "Merchantability and Fitness for A Particular Purpose" cannot be waived and are a mandatory part of this solicitation and any ensuing Contract.

END SECTION 3

IFB 14-16
Annual Water and Wastewater Chemical Requirements
SECTION 4

4. SPECIAL TERMS AND CONDITIONS

4.1 Delays

- A. By the Contractor: Unauthorized delays by the Contractor are prohibited. After prior written warning to the Contractor, FW may declare the Contractor in default for unacceptable delays. If such a declaration is made, FW reserves the unilateral right to cure the default by any means available to FW, including (but not limited to) liquidated damages, redeeming the Contractor's Performance Bond (or other security as agreed to by FW prior to contract award); and to recover any additional costs, lost funds and/or related expenses. This is not a limitation of FW's legal rights to recover damages due to Contractor default in any other way.
- B. By FW: The Contractor shall not be responsible for delays caused by FW, its agents, or other Contractors. To the extent that the Contractor is unable to proceed due to the actions or inaction's of FW, its agents, employees or other Contractors, the Contractor shall be granted an extension to the installation schedule equal to the documented amount of time the Contractor was prevented from performing work. The Contractor shall not be eligible for damages as a result of FW delays.

4.2 Force Majeure

If a delivery is delayed by Act of God, terrorism, war, embargo, fire, or explosion not caused by the negligence or intentional act of the Contractor or his subcontractors or supplier(s), a reasonable extension of time as FW or the Member deems appropriate may be granted. Upon receipt of a written request and justification for any extension from the Contractor, FW or the Member may in its sole discretion (i) extend the time for delivery of the Commodity; (ii) suspend the Contract in whole or in part and obtain one or more of the Commodities elsewhere for a time, or (iii) terminate the Contract; all without liability to Contractor on the part of FW or Member, as the case may be. Contractor's request and justification shall be subject to such substantiation and further inquiries as FW or Member may require.

4.3 Time Is Of The Essence

Time is of the essence: All chemicals shall be delivered within the time or times specified on the Contractor's Bid Form or otherwise set forth in the applicable Purchase Order. Notwithstanding the foregoing, the Contractor shall not be deemed to have breached the terms and conditions of the contract Documents to the extent any delay is due to circumstances beyond its reasonable control and without the fault or negligence of the Contractor provided that the Contractor first shall have provided Fairfax Water with written notice (to include facsimile or e-mail) of any such delay within five days after the occurrence of events or circumstances causing the delay. After prior written warning to the Contractor, FW may declare the Contractor in default for unacceptable delays. If such a

IFB 14-16
Annual Water and Wastewater Chemical Requirements

declaration is made, FW reserves the unilateral right to cure the default by obtaining the services of a qualified Contractor to complete the project and charge any additional or increased costs to the Contractor.

4.4 Contractor Replacement

In the event that a Contractor is declared to be in default, the next lowest responsive and responsible Bidder will be given an opportunity to accept a contract for the chemicals that were provided by the defaulting Contractor. If within 180 calendar days after contract award, the prospective Contractor must agree to provide the chemicals at its original bid price. After the first 180 calendar days, the Contractor will be allowed to adjust the original bid price by an amount equal to the annualized PPI-SA for Chemicals and Allied products or the specific series Id referenced on their original bid for the period of time between contract award and Fairfax Water's offer to accept the contract. FW reserves unto itself, the unilateral right to either not extend an offer to the next lowest Bidder or to rebid the subject chemicals.

4.5 Contractor's Compliance and Safety Program

- A. The Contractor shall comply with all applicable Federal, State, and local safety programs, regulations, standards, and codes, to include though not limited to:
1. The Virginia Uniform Statewide Building Code,
 2. Building Officials & Code Administrators (BOCA) codes (together with adopted International Codes),
 3. Virginia Department of Health (VDH) regulations,
 4. Virginia Department of Environmental Quality (DEQ) regulations,
 5. Virginia-OSH (VOSH) regulations, and
 6. National Electric Code (NEC).

END SECTION 4

IFB 14-16
Annual Water and Wastewater Chemical Requirements

THIS PAGE INTENTIONALLY LEFT BLANK

IFB 14-16 Annual Water and Wastewater Chemical Requirements

ATTACHMENT 1

REFERENCES

BIDDER'S NAME: _____

CHEMICAL BEING BID: _____

1. **COMPANY NAME:** _____

ADDRESS: _____

CONTACT PERSON: _____

TELEPHONE: (____) - _____ - _____

FAX: (____) - _____ - _____

E-MAIL: _____

2. **COMPANY NAME:** _____

ADDRESS: _____

CONTACT PERSON: _____

TELEPHONE: (____) - _____ - _____

FAX: (____) - _____ - _____

E-MAIL: _____

3. **COMPANY NAME:** _____

ADDRESS: _____

CONTACT PERSON: _____

TELEPHONE: (____) - _____ - _____

FAX: (____) - _____ - _____

E-MAIL: _____

APPENDIX A
CHEMICAL REQUIREMENTS

Part 1 - General

- 1 Section includes a Table of Contents of Required Chemicals, Participating Jurisdictions street addresses and total estimated quantities.

TABLE OF CONTENTS

ITEM NO.	CHEMICAL /DESCRIPTION
1	Ammonium Hydroxide, dry, 19%
2	Calcium Thiosulfate, 24%
3A	Caustic Soda, dry, 25%
3B & 3C	Caustic Soda, dry, 50% (Bulk/Totes)
4	Copper Sulfate Pentahydrate (Liquid) SCI-62
5	Copper Sulfate
6	Ferric Chloride
7	Hydrofluosilicic Acid, 23%
8	Lime Hydrated
9	Methanol (Methyl Alcohol)
10A & 10B	Muriatic Acid
11A & 11B	Oxygen, Liquid
12	Pebble Quicklime
13	Phosphoric Acid, 75%
14	Polyaluminum Chloride
15A	Polymer, Cationic Liquid (Bulk)
15B	Polymer, Non-Ionic (Totes)
15C	Polymer, Cationic Dewatering
16A & 16B	Potassium Permanganate (Bulk/Cycle Bins)
17A & 17B & 17C	Powder Activated Carbon
17D & 17E	Powder Activated Carbon – EMERGENCY SUPPLY
18A & 18B	Sodium Bisulfite (Bulk/Totes)
19A	Sodium Hypochlorite, 15%
19B	Sodium Hypochlorite, 15%B – Max Chlorate 1500 PPM
20	Sodium Metabisulfite
21	Sulfuric Acid, 93%

APPENDIX A

CHEMICAL REQUIREMENTS

2 Delivery addresses for each Member listed below.

Fairfax County
Department of Public Works
Wastewater Treatment Plant
9399 Richmond Highway
PO Box 268
Lorton, VA 22199-0268

Fairfax Water

Site A: Corbalis Treatment Facility
1295 Fred Morin Road
Herndon, VA 20170

Site B: Griffith Treatment Facility
9600 Ox Road
Lorton, VA 22079

Site C: High Dam
460 Mill Street
Occoquan VA 22125

Loudoun Water
Goose Creek Water Treatment Facilities
20521 Ashburn Road
Ashburn, VA 20147

APPENDIX A
CHEMICAL REQUIREMENTS
BID ITEM NO. 1

1. AMMONIUM HYDROXIDE, Dry, 19%

A. GENERAL SPECIFICATIONS

1. Chemical strength shall be within the range 19.0 to 19.9%, and shall meet the requirements as specified in ANSI/AWWA Standard B306-07, or latest version Aqua Ammonia (Liquid Ammonium Hydroxide). This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals-Health Effects.

B. PACKAGING AND SHIPPING

1. Bulk – the contractor shall deliver liquid, in tank trucks and offload into storage tanks on the property.

C. DELIVERY DESTINATIONS AND ESTIMATED QUANTITIES

Location	Estimated Total usage	Delivery amount/order
FW Site A	195,000 Dry Pounds	Full truckload
FW Site B	170,000 Dry Pounds	Full truckload

END OF ITEM NO. 1

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 2

2. CALCIUM THIOSULFATE 24%

A. QUALITY/CONTENT

This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals-Health Effects.

The Calcium Thiosulfate shall meet the following physical and chemical properties listed below:

- | | |
|-----------------------------------|-------------------|
| 1. Assay (w/w%) | 24% minimum |
| 2. Specific Gravity (23/23 deg C) | 1.24 minimum |
| 3. pH (full strength) | 6.5 – 8.0 |
| 4. Color | < 15 APHA |
| 5. Clarity | Clear Colorless |
| 6. Odor | Not Objectionable |

B. PACKAGING AND SHIPPING

1. Bulk – The contractor shall deliver liquid in tank trucks and offload it into storage tanks on the property.

C. ESTIMATED QUANTITY AND DELIVERY

Location	Estimated Total usage	Delivery amount/order
FW Site A	100 Tons	Full Truckload

END OF ITEM NO. 2

APPENDIX A
CHEMICAL REQUIREMENTS

BID ITEM NO. 3A

3A. CAUSTIC SODA 25%

A. QUALITY/CONTENT

1. This liquid is to contain a minimum of 25% anhydrous sodium hydroxide, NaOH, and shall not contain any other substances capable of producing deleterious or injurious effects upon the health of those consuming the water to which the caustic soda has been added, or causing the water so treated to fail to meet the requirements of the USEPA Primary Drinking Water Standards.

B. SPECIAL NOTE

1. The members have included an explanation of CAUSTIC SODA – WEIGHTS AND SHIPMENTS. The explanation is described in Appendix B, Pages B-1 and B-2.

C. PACKAGING AND SHIPPING

1. Bulk – the contractor shall deliver liquid in tank truck lots of 3,000 to 4,000 gallons per load.

D. ESTIMATED QUANTITY and DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
Fairfax County DPW	290 DST	Full Truckload

END OF ITEM NO. 3A

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 3B & 3C

3B & 3C. CAUSTIC SODA 50%

A. QUALITY/CONTENT

1. This liquid is to contain a minimum of 50% anhydrous sodium hydroxide, NaOH, and shall meet the requirements as specified in ANSI/AWWA Standard B501-13, or latest version Sodium Hydroxide (Caustic Soda). This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals—Health Effects.

B. SPECIAL NOTE

1. The members have included an explanation of CAUSTIC SODA – WEIGHTS AND SHIPMENTS. The explanation is described in Appendix B, Pages B1 and B2.

C. PACKAGING AND SHIPPING

1. Bulk - the contractor shall deliver liquid in tank truck lots of 3,000 to 4,000 gallons per load. Billing is calculated on the dry weight content of sodium hydroxide on 76% of sodium oxide basis. **Temperature of Caustic soda shall not go below 50°C.** If temperature is found below 50° C, jurisdiction may reject shipment.
2. Totes - the contractor shall deliver liquid in 330 gallon tote containers per load. Billing is calculated on the dry weight content of sodium hydroxide on 76% of sodium oxide basis. **Temperature of Caustic soda shall not go below 50°C.** If temperature is found below 50° C, jurisdiction may reject shipment

D. ESTIMATED QUANTITY and DELIVERY DESTINATIONS

<u>Location</u>	<u>Estimated Total usage</u>	<u>Delivery amount/order</u>
FW Site A	500 DST, Bulk	Full Truckload
FW Site B	830 DST, Bulk	Full Truckload
Loudoun Water*	32 Tons, Totes	2 Totes

*Loudoun Water: Trucks must offload rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 3B & 3C

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 4

4. COPPER SULFATE PENTAHYDRATE (LIQUID) SCI-62 OR EQUAL

A. SPECIFICATIONS

1. The Copper based algicide/bactericide supplied shall contain no soluble material or organic substances in quantities capable of producing deleterious or injurious effects on health of those consuming water that has been treated properly with the Copper based algicide/bactericide products.
2. The active ingredient shall be Copper sulfate pentahydrate. The metallic Copper equivalent shall be at least 5% by weight. The Copper based algicide/bactericide shall self-disperse, and evenly distribute throughout the treatment area without mixing. In order for product to stay in the water column, it shall be a chelated copper. It must not precipitate out of solution but remain fully dissolved ensuring long term algae control without over treatment. The Copper based algicide/bactericide shall be chelated, 100% water soluble, and non-combustible.
3. Product must be registered as an algicide/bactericide with the U.S. EPA.
4. Product must be certified to ANSI-NSF Standard 60 as a drinking water additive.
5. Product must be NSF Certified

B. PACKAGING AND SHIPPING

1. The Copper Sulfate Pentahydrate (Liquid) SCI-62 shall be packed in durable, dust tight 275-300 gallon plastic totes.

C. ESTIMATED QUANTITY and DELIVERY DESTINATIONS

<u>Location</u>	<u>Estimated Total usage</u>	<u>Delivery amount/order</u>
FW Site B	4,600 Gallons	(2 - 7) Totes

END OF ITEM NO. 4

APPENDIX A
CHEMICAL REQUIREMENTS
BID ITEM NO. 5

5. COPPER SULFATE

A. SPECIFICATIONS

1. The standard commercial fine crystal grade of copper sulfate pentahydrate containing at least 99% of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$. The percentage of elemental copper shall not be less than 25%, and insoluble matter shall not exceed 0.5%. Certification or quality assurance of mesh size shall be attached to quotes.

B. PACKAGING AND SHIPPING - 50# bags

1. The copper sulfate shall be packed in durable, dust-tight 50# paper bags, shrink wrapped and palletized, with any broken bags exchanged per request of the participant.
2. Bags shall be palletized on an "exchange" basis, delivered to the treatment plant.

C. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
FW Site B	25 tons, 40 mesh, bags	10 pallets

END OF ITEM NO. 5

APPENDIX A
CHEMICAL REQUIREMENTS
BID ITEM NO. 6

6. FERRIC CHLORIDE Grade 2 Liquid

A. SPECIFICATIONS

1. The chemical may be a by-product of other production processes. The chemical shall be supplied as an aqueous solution, containing not less than twenty-eight percent (28%) by weight of anhydrous ferric chloride (FeCl₃) all of which shall be in solution. Not more than three-quarters of one percent (0.75%) of the total iron shall be in the ferrous state.
2. The solution shall not contain more than five-tenths of one percent (0.5%) insoluble matter of which not more than two-tenths of one percent (0.2%) shall be settleable solids. The maximum particle size of any insoluble material shall be one-sixteenth of an inch (1/16").
3. All bids must be accompanied by a current typical concentration of PCB concentration analysis and typical heavy metals concentration analysis, as well as percentages of free acid as hydrochloric acid, Ferric Chloride; Ferrous Chloride; and insolubles. Failure to include any of this data may result in declaration of non-responsiveness.

B. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
Fairfax County DPW	1,800 tons, dry	4,000 Gallons

END OF ITEM NO. 6

APPENDIX A
CHEMICAL REQUIREMENTS

BID ITEM NO. 7

7. HYDROFLUOSILICIC ACID, 23%

A. GENERAL SPECIFICATION

1. The product furnished shall be not less than 23% solution hydrofluosilicic acid, H_2SiF_6 , and shall meet the requirements as specified in ANSI/AWWA Standard B703-11, or latest version Hydrofluosilicic Acid. This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals-Health Effects.

B. SPECIAL NOTE

1. The members have included an explanation of HYDROFLUOSILIC ACID – WEIGHTS AND SHIPMENTS. The explanation is described in Appendix B, Page B-3.

C. PACKAGING AND SHIPPING

1. Bulk - The contractor shall deliver liquid, in tank truck lots of 3,000 to 4,000 gallons per load.

D. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
FW Site A	760 tons	full truckload
FW Site B	485 tons	full truckload
Loudoun Water*	20 tons	full truckload

*Loudoun Water: Trucks must offload rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 7

APPENDIX A
CHEMICAL REQUIREMENTS
BID ITEM NO. 8

8. LIME HYDRATED

A. QUALITY

1. The hydrated lime shall be white in color, dry, and the best quality.

B. CALCIUM OXIDE EQUIVALENT

1. Water soluble calcium oxide equivalent shall be not less than 68% CaO by weight.

C. INSOLUBLES

1. Not to exceed 5% by weight.

D. MAGNESIUM OXIDE

1. The lime shall contain no magnesium in excess of an amount equivalent to 1-1/2% of magnesium oxide MgO.

E. PACKAGING AND SHIPPING

1. Bag - the hydrated lime shall be packed in durable, dust-tight 50# paper bags and shrink wrapped which will not be readily broken in handling and storage.
2. Bags shall be palletized on an "exchange" basis, delivered to the treatment plant.

F. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
Loudoun Water*	310 tons, bags	20-25 tons

*Loudoun Water: Trucks must off load rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 8

APPENDIX A
CHEMICAL REQUIREMENTS
BID ITEM NO. 9

9. METHANOL (METHYL ALCOHOL)

A. SPECIFICATIONS

1. Methanol is a clear, colorless, flammable liquid with a mild odor (also called Methyl Alcohol). The product shall be free of priority pollutants. Please see table for more details.

B. DELIVERY

1. Methanol delivery trucks must be equipped with vapor recovery system compatible with ASA equipment.

C. PRODUCT SPECIFICATION FOR METHANOL – GRADE AA

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, 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

APPENDIX A

CHEMICAL REQUIREMENTS

D. PACKAGING AND SHIPPING

1. Bulk – The contractor shall deliver liquid in tank truck lots of 7,000 gallons per load.

E. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

<u>Location</u>	<u>Estimated Total usage</u>	<u>Delivery amount/order</u>
Fairfax County DPW	250,000 gallons	Full truck load

END OF ITEM NO. 9

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 10A & 10B

10A & 10B. MURIATIC ACID

A. QUALITY/CONTENT

Hydrochloric acid	31.2 - 31.6%
Specific gravity	1.159 - 1.1609
Iron (Fe)	< 5 ppm
Heavy metals (Pb, Hg)	< 5 ppm
Arsenic (As)	< 1 ppm
Sulfate	< .5%
Free Chlorine (Cl)	< .003%

B. PACKAGING AND SHIPPING

1. Bulk - the contractor shall deliver liquid in tank trucks and offload into a storage tank located at each site.
2. Totes – the contractor shall deliver liquid in 275 gallon tote bins.

C. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
Fairfax County DPW	1000 Gallons	Bulk
FW Site A	6 Tons	Totes

END OF ITEM NO. 10A & 10B

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 11A & 11B

11A & 11B. OXYGEN, LIQUID

A. GENERAL SPECIFICATIONS

1. Liquid Commercial grade Oxygen (LOX) will be used to generate Oxygen (O₂) which serves as a feed gas in the generation of Ozone (O₃). Ozone is used for disinfection and/or oxidation of water supplies. This chemical shall meet the requirements as specified in ANSI/AWWA Standard B304-13, or latest version Liquid Oxygen for Ozone Generation for Water systems. This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals—Health Effects.

Chemical Requirements and Purity (Referencing Section 4.3 ANSI/AWWA Standard B304-13)

-LOX suitable for use in the generation of ozone for the treatment of potable water shall have an oxygen content of at least 99.5 percent, by weight. The percentage of purity of LOX shall be determined in accordance with Sec. 5.3.3. ANSI/AWWA Standard B304-13.

-Water content. The water content of the LOX shall not exceed a dew point of -80°F (-62.2°C or 7.8 ppm [v/v]) at the time of delivery.

-Total hydrocarbon content. The total hydrocarbon content (as methane) of the LOX shall not exceed 40 ppm (v/v) at the time of delivery.

-Particulate size and content. The liquid oxygen shall be filtered through a 10 µm nominal (40 µm absolute) filter located in the line to the shipping container.

-Other impurities. Other impurities include nitrogen, argon, and other inert gases. The sum of these impurities shall not be sufficient to prevent achieving the minimum oxygen content of Sec. 4.3 of ANSI/AWWA Standard B304-13.

-Product certifications. LOX is a direct additive used in the treatment of potable water. This material should be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60. Evaluation shall be accomplished in accordance with requirements that are no less restrictive than those listed in NSF/ANSI 60. Certification shall be accomplished by a certification organization accredited by the American National Standards Institute.

B. PACKAGING AND SHIPPING

1. Bulk - the contractor shall deliver liquid, in tank trucks and offload into storage tanks on the property.
2. Product inventory shall not drop below 50% total capacity without prior permission from Plant Manager.

APPENDIX A
CHEMICAL REQUIREMENTS

C. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
FW Site A	978,820 CCF	full truckload
FW Site B	1,057,100 CCF	full truckload
FW Site C (11B) NSF CERTIFICATION NOT REQUIRED (SITE C ONLY)	300,000 CCF	full truckload

END OF ITEM NO. 11A & 11B

APPENDIX A
CHEMICAL REQUIREMENTS

BID ITEM NO. 12

12. PEBBLE QUICKLIME

A. CALCIUM OXIDE CONTENT

1. The quicklime shall consist essentially of calcium oxide with a lesser amount of magnesium oxide.
2. Quick lime shall be supplied in pulverized form known as granular type. It shall be of best quality, highly reactive, freshly burned, substantially free of core, as dirt or unburned stone. The lime to be used for post lime treatment shall be high calcium granular suitable for conditioning wastewater treatment plant sludge and for pH and alkalinity control in the water treatment process.
2. Material shall contain a minimum of 90% available calcium oxide, and shall be the quality known as "quick-slaking", readily disintegrating into a suspension without objectionable amounts of un-dissolved or un-slaked materials. Insoluble matter shall not exceed 2% by weight.
3. It shall not contain floating insoluble particles that are of a nature that cannot be captured and retained by the slaker grit removal system which operates on the basis of gravity separation.
4. For each delivery, vendor shall provide a certification of analysis of the following: slaking test, objectionable insoluble matter test, gradation test, loss on ignition test and available Calcium oxide test.

B. SLAKING RATE

1. A temperature rise of 40°C shall occur in 3 minutes or less and the reaction shall be complete within 6 minutes regardless of the Calcium Oxide content.

C. SIZE

1. Material is to be crushed and screened so that none shall be retained on a 1/4" sieve screen and not more than 25% passing a No. 100 US Standard mesh screen and shall contain no mineral or organic substances in quantities that will adversely affect the percent available Calcium Oxide when tested in accordance *American Water Works Association Standard for Quicklime and Hydrated Lime*.
 - a. Pebble Quicklime for slaking application: 3/4-1/4" sieve size.
 - b. Granular (pebble) Quicklime for wet application: 5/16-1/4" sieve size.

D. TEST METHODS

1. The method employed to test materials furnished under this Contract shall conform to AWWA Standard B202-93, or latest revision, except as follows:
 - a. In the determination of available Calcium oxide, AWWA B202-93, .3, Oxalic Acid shall be used instead of Hydrochloric Acid.

APPENDIX A

CHEMICAL REQUIREMENTS

- b. Reagent 0.1782 N Oxalic Acid: dissolve 11.2319G Oxalic Acid in de-mineralized water and dilute to one liter using a volumetric flask, and prepare fresh monthly.
- c. Rounding off: The rounding shall be in accordance with the following rule: ≥ 5 round up; < 5 round down.

E. SPECIAL NOTE

- 1. The members have included an explanation of QUICKLIME WEIGHTS AND SHIPMENTS. The explanation is described in Appendix B, Page B-5.

F. PACKAGING AND SHIPPING

- 1. Bulk - the contractor shall deliver by truck and unload by means of pneumatic conveying equipment into storage tanks located at each site and shall maintain all necessary hoses leading to the fixed connection provided.

G. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
Fairfax County DPW	1,000 Tons	Full truckload

END OF ITEM NO. 12

APPENDIX A
CHEMICAL REQUIREMENTS

BID ITEM NO. 13

13. PHOSPHORIC ACID, 75%

A. QUALITY/CONTENT

Phosphoric acid is used for corrosion control in potable water treatment. This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals-Health Effects. In addition it shall meet the physical and chemical properties listed below.

- | | |
|--------------------------------|----------------------------|
| 1. Degrees baume (25°/15.5/C°) | 53° |
| 2. Freezing point (°C) | -17 – 21C |
| 3. Physical appearance | colorless/liquid |
| 4. pH | <1 at 1 wt/wt% |
| 5. Specific gravity | >1.573 at 25C |
| 6. Density | 1.573 to 1.693 g/ml at 25C |
| 7. Water solubility | Miscible |
| 8. Vapor pressure | 5.65 to 2.16 mm Hg at 20C |

B. PACKAGING AND SHIPPING

1. Bulk – The contractor shall deliver liquid in tank trucks and offload into storage tanks on the property.
2. Tote bins, 330 gallons

C. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

<u>Location</u>	<u>Estimated Total usage</u>	<u>Delivery amount/order</u>
FW Site A	230 tons	Truckload
FW Site B	295 tons	Truckload
Loudoun Water*	22 tons/330 Gallon Totes	2 to 4 Totes

*Loudoun Water: Trucks must off load rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 13

APPENDIX A
CHEMICAL REQUIREMENTS

BID ITEM NO. 14

14. POLYALUMINUM CHLORIDE OR POLYALUMINUM HYDROXYCHLOROSULFATE

A. GENERAL SPECIFICATIONS

These chemical are used as the primary coagulants in the water treatment process, and shall meet the requirements as specified in ANSI/AWWA Standard B408-10, or latest version Liquid Polyaluminum Chloride. The chemical shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals-Health Effects.

1. Aluminum salts used in coagulation and sedimentation processes.
2. The Polyaluminum Chloride must be liquid in form and easily applied via metering pumps. It shall not contain particles of sand, grit, coke, clay or gelatinous material in sizes that will clog flow regulating valves and appurtenances or accumulate as sludge in the storage tanks. Vendors will be responsible for removing (at their expense) excessive PACL residual accumulations from the storage tanks at the water treatment plants.
3. The Polyaluminum Chloride (PACL) must be completely water soluble and not significantly depress the treated water pH. The pH of the liquid PACL solution must be greater than 2.3.
4. Aluminum concentration (expressed as % Al_2O_3) shall exceed 9%.
5. Basicity shall exceed 70%.
6. Sulfates (expressed as % SO_4) shall be a minimum of 1.7%.
7. Freezing temperature shall be less than $-12^{\circ}C$. (Unless vendor supplies two approved PACL products:
 - a. for the winter season with a freezing temperature less than $-12^{\circ}C$
 - b. for the rest of the contract period with a freezing temperature less than $0^{\circ}C$.
8. Polyaluminum chloride shall not emit any organic odors.
9. Polyaluminum chloride must not contain any amounts of natural or synthetic polymers.

B. APPROVED PRODUCTS

1. For product with freezing temperature lower than $-12^{\circ}C$.
 - a. Kemira Sternpac 70
 - b. USALCO: DelPac 2500
 - c. Kemira PAX XL8

APPENDIX A

CHEMICAL REQUIREMENTS

C. TECHNICAL SUPPORT

- 1. Supplier must be capable of providing technical support, including on-site jar testing and training as specified by Plant Operators. The supplier's technical support person(s) shall be available for on-site technical support within 24 hours of notification. Such technical person(s) name, experience related to using PACL as a primary coagulant in drinking water treatment plants, home/office address and telephone numbers must be included with this bid.

D. SPECIAL NOTE

- 1. The members have included an explanation of PACL – WEIGHTS and SHIPMENTS. The explanation is described in Appendix B, Page B-4.

E. PACKAGING AND SHIPPING

- 1. Bulk – the contractor shall deliver liquid in tank truck and offload into storage tanks located at each site.

F. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

<u>Location</u>	<u>Estimated Total usage</u>	<u>Delivery amount/order</u>
FW Site A	650 Dry Tons AL203	Full Truckload
FW Site B	838 Dry Tons AL203	Full Truckload
Loudoun Water*	416 Dry Tons AL203	Full Truckload

*Loudoun Water: Trucks must off load rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 14

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 15A, 15B, & 15C

15A & 15B & 15C. POLYMERS LIQUID & DRY

A. GENERAL SPECIFICATION

1. Some polymer properties desired in this product are:
 - a. High molecular weight.
 - b. Chlorine resistant.
 - c. Charge density not pH sensitive.
 - d. Supplied in liquid form.
 - e. Reduces or eliminates the need for inorganic flocculent chemicals.
 - f. Forms an easily dewatered sludge.
 - g. Specify gravity equal or near to water (s.g.=1.00).
 - h. Water soluble.
 - i. Approved by NSF for drinking water at an application rate up to 62 ppm in the influent water.
 - j. Ability to be fed full strength, or diluted in-line to the point of application.
 - k. Evaluation of the polymer's ingredients under OSHA'S Hazard Communication Rule 29 CFR 1910.1200 demonstrating none of the ingredients hazardous.
 - l. Free from monomers
 - m. Non-TTHM forming upon being chlorinated, at concentrations encountered in normal water purification.
 - n. Polymer must be affective at 32° F
 - o. Polymer must not settle while in storage.
2. (15A) Cationic Liquid Polymer (Bulk)
 - a. The following eight cationic liquid polymers are considered equivalent:
 1. Nalco 8108
 2. Coyne 2000
 3. Calgon Catfloc TL
 4. Cytec Magnifloc 591C
 5. Polydyne Clarifloc C-338
 6. Southern Water Consultants EC274
 7. Sweetwater Technology SW102 VHV
 8. CIBA Magnifloc LT7996
3. (15B) Non-Ionic Polymer (Totes)
 - a. Fairfax Water has tested Polymers and has found the following acceptable.
 1. Cytec 1986N
 2. CIBA Magnifloc E-30 & E-30S
 3. Clarifloc N-6310
4. (15C) Cationic Dewatering Polymer
 - a. The following cationic dewatering polymer is acceptable.
 1. Polydyne C-6210

APPENDIX A

CHEMICAL REQUIREMENTS

B. TECHNICAL SUPPORT

1. The supplier must be capable of providing technical support, including on-site jar testing and training as specified by plant operations.

C. PACKAGING AND SHIPPING

1. Bulk deliveries shall be made in tank truck lots of 3,000 to 4,000 gallons per delivery. Approximately 13-17 tons per tank truck.
2. Tote Bins - 275 gallons
Drums - 55 gallons

D. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Section A Above	Location	Estimated Total usage	Delivery amount/order
Item 2 (15A)	FW Site A	50 Tons	Full Truckload
Item 2 (15A)	FW Site B	170 Tons	Full Truckload
Item 3 (15B)	FW Site A	6 Tons	Totes
Item 4 (15C)	FW Site A	100 Tons	Full Truckload

END OF ITEM NO. 15A, 15B, & 15C

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 16A & 16B

16A & 16B. POTASSIUM PERMANGANATE

A. GENERAL SPECIFICATIONS

Potassium Permanganate is an oxidizer that is used primarily for the removal of organic matter that is responsible for many objectionable odors, tastes, and color present in the source water. It also has the ability to reduce iron, manganese, and hydrogen sulfide. This chemical shall meet the requirements as specified in ANSI/AWWA Standard B603-10, or latest version Permanganates. This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals—Health Effects.

B. PHYSICAL AND CHEMICAL PROPERTIES

1. Free-flowing grade with $KMnO_4$ content of 97%, or higher.
2. Bulk density approximately 100 pounds per cubic foot.
3. Bulk density shall be relatively dust-free in handling.
4. Specific gravity equal to 1.039 of a 6% solution by weight, at 68°F/20°C
5. Chemical stable in storage for at least three years.

C. PACKAGING AND SHIPPING

1. Bulk – Tons the contractor shall deliver by truck and unload by means of pneumatic conveying equipment into storage tanks located at each site.
2. Cycle Bin – 3,300 lbs.

D. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
FW Site A	25 Tons, bulk	full truckload
FW Site B	122 Tons, Cycle Bin	4-8 Cycle Bins

END OF ITEM NO. 16A & 16B

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 17A & 17B & 17C

17A & 17B & 17C. POWDER ACTIVATED CARBON

A. CHEMICAL SPECIFICATIONS

1. Application: For use in the water treatment process to be used in adsorption of impurities for water supply service applications.
2. The PAC shall meet or exceed ANSI/AWWA Standards # B-600-10, or latest version and shall be NSF 60 approved.
3. The carbon shall be finely powdered grade: sieve sizing as follows, not less than:
 - 99% passing a 100 mesh sieve,
 - 95% passing a 200 mesh sieve, and
 - 90% passing a 325 mesh sieve

B. SAMPLES

Prospective bidders must submit a one pound sample of PAC Powder Activated Carbon for analysis by the bid submission deadline. The sample must be of the same type, grade and quality as the bidder offers to sell to FW throughout the life of the contract. See Section 1.4 Instructions for Submitting Samples

C. TESTING PROCEDURES

1. Each PAC sample will be tested for: AD, particle sizing, hardness, ash, and Iodine or butane number.
2. Each PAC sample will be analyzed by the Simpson and MacLeod analysis process (*see description below). Analysis will be performed by an independent organization fully qualified to perform the analysis.

* The Simpson and MacLeod: Methylisoborneol (MIB) and Geosmin are taste and odor causing compounds in water. The "Simpson and MacLeod" testing procedure is used to determine the MIB and Geosmin removal capabilities of the PAC's. The PAC with the best removal capacity, as analyzed by close loop stripping and gas chromatography, is assigned a bid ratio number of 1.0. Bid ratios for the other PAC's are then determined by dividing the residual MIB and Geosmin levels by the residual MIB and Geosmin levels of the PAC exhibiting the most removal. The final bid ratio number for each PAC is multiplied by each bidder's quoted price per ton to determine the most cost-effective PAC.

D. PACKAGING

1. Shipping and Handling Charges: The cost of shipping and handling is to be included in the bid (unit) price (i.e., bid FOB Delivered). Members will not be liable for additional fees of any kind for regularly scheduled deliveries.

APPENDIX A

CHEMICAL REQUIREMENTS

- 2 Bulk: The truck is to be unloaded by compressed air transfer facilities through a 4" line obtained on the truck. All delivery costs are to be included in the unit price (i.e. FOB delivered).
3. Bag: The activated carbon shall be packed in durable dust tight 50# paper bags. Bags shall be palletized and shrink wrapped on an "exchange" basis delivered to the treatment plant.

E. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

<u>Location</u>	<u>Estimated Total usage</u>	<u>Delivery amount/order</u>
FW Site A	50 tons, bulk	Full Truckload
FW Site B	50 tons, tote sacks (Approximately 1 Ton/Sack)	10 Tons
Loudoun Water*	26 tons, bags	2 Tons

*Loudoun Water: Trucks must off load rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 17A & 17B & 17C

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 17D & 17E

17D & 17E. POWDER ACTIVATED CARBON - EMERGENCY SUPPLY

A. CHEMICAL SPECIFICATIONS

1. Application: For use in the water treatment process to be used in adsorption of impurities for water supply service applications.
2. The PAC shall meet or exceed ANSI/AWWA Standards #B600-10, or latest version and shall be NSF 60 approved.
3. The carbon shall be finely powered grade: sieve sizing as follows, not less than:
 - 99% passing a 100 mesh sieve,
 - 95% passing a 200 mesh sieve, and
 - 90% passing a 325 mesh sieve

B. SAMPLES

Prospective bidders must submit a one pound sample of PAC Powder Activated Carbon for analysis by the bid submission deadline. The sample must be of the same type, grade and quality as the bidder offers to sell to FW throughout the life of the contract. See Section 1.4 Instructions for Submitting Samples

C. TESTING PROCEDURES

1. Each PAC sample will be tested for: AD, particle sizing, hardness, ash, and Iodine or butane number.
2. Each PAC sample will be analyzed by the Simpson and MacLeod analysis process (*see description below). Analysis will be performed by an independent organization fully qualified to perform the analysis.

* The Simpson and MacLeod: Methylisoborneal (MIB) and Geosmin are taste and odor causing compounds in water. The "Simpson and MacLeod" testing procedure is used to determine the MIB and Geosmin removal capabilities of the PAC's. The PAC with the best removal capacity, as analyzed by close loop stripping and gas chromatography, is assigned a bid ratio number of 1.0. Bid ratios for the other PAC's are then determined by dividing the residual MIB and Geosmin levels by the residual MIB and Geosmin levels of the PAC exhibiting the most removal. The final bid ratio number for each PAC is multiplied by each bidder's quoted price per ton to determine the most cost-effective PAC.

D. PACKAGING

1. Shipping and Handling Charges: The cost of shipping and handling is to be included in the bid (unit) price (i.e., bid FOB Delivered). Members will not be liable for additional fees of any kind for regularly scheduled deliveries.

APPENDIX A

CHEMICAL REQUIREMENTS

- 2 Bulk: The truck is to be unloaded by compressed air transfer facilities through a 4" line obtained on the truck. All delivery costs are to be included in the unit price (i.e. FOB delivered).
- 3. **DELIVERY SHALL BE MADE TO THE PLANT WITHIN 24 HOURS OF PLACING THE ORDER.**

E. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

<u>Location</u>	<u>Estimated Total usage</u>	<u>Delivery amount/order</u>
FW Site A	50 tons, bulk	Full Truckload
FW Site B	50 tons, tote sacks (Approximately 1 Ton/Sack)	10 Tons

END OF ITEM NO. 17D & 17E

APPENDIX A
CHEMICAL REQUIREMENTS

BID ITEM NO. 18A & 18B

18A & 18B. SODIUM BISULFITE

A. GENERAL SPECIFICATIONS

Liquid Sodium Bisulfite is used as a dechlorinating agent or oxygen scavenger. Where it is used as a direct additive in the treatment of potable water, the chemical shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals—Health Effects.

B. QUALITY/CONTENT

1. 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.

C. PACKAGING AND SHIPPING

1. Bulk - the contractor shall deliver liquid in tank trucks and offload into storage tanks located at each site.
2. Tote bins, 275 gallon

D. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
Fairfax County DPW	140,000 gallons, bulk	4,000 gallon truckload
FW Site A	1,100 gallons, tote	1 – 4 totes
FW Site B	35,000 gallons	4,000 gallon truckload
Loudoun Water*	1,100 gallons, tote	1 – 4 totes

*Loudoun Water: Trucks must off load rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 18A & 18B

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 19A

19A. SODIUM HYPOCHLORITE, 15%

A. GENERAL SPECIFICATIONS

Liquid Sodium Hypochlorite is used as a disinfectant in the potable water treatment process. This chemical shall meet the requirements as specified in ANSI/AWWA Standard B300-10, or latest version Hypochlorites. This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals—Health Effects.

1. Liquid solution clear or practically clear and free from visible contaminants. As delivered, the weight percent of NaOCL shall not be less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.
2. Boiling Point of 110°C for 15% NaOCL
3. Complete water solubility
4. pH of approximately 12
5. Specific gravity (20°C = 1) 1.206
6. Total free alkali (expressed as NaOH) shall not exceed 1.5% by weight

B. PACKAGING AND SHIPPING

1. Bulk - The contractor shall deliver liquid, in tank truck lots of 3,000 to 4,000 gallons per load.

C. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
Fairfax County DPW	680,000 Gallons	Full Truckload
FW Site A	950,000 Gallons	Full Truckload
FW Site B	1,023,200 Gallons	Full Truckload
Loudoun Water*	85,600 Gallons	Full Truckload

*Loudoun Water: Trucks must off load rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 19A

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 19B

19B. SODIUM HYPOCHLORITE, 15%B - MAX CHLORATE 1500 PPM

A. GENERAL SPECIFICATIONS

Liquid Sodium Hypochlorite is used as a disinfectant in the potable water treatment process. This chemical shall meet the requirements as specified in ANSI/AWWA Standard B300-10, or latest version Hypochlorites. This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals—Health Effects.

1. Liquid solution clear or practically clear and free from visible contaminants. As delivered, the weight percent of NaOCL shall not be less than 12.5% nor greater than 15.5% of available chlorine with approximately 0.3% to 0.85% excess NaOH for stability control.
2. Boiling Point of 110°C for 15% NaOCL
3. Complete water solubility
4. pH of approximately 12
5. Specific gravity (20°C = 1) 1.206
6. Total free alkali (expressed as NaOH) shall not exceed 1.5% by weight
7. Maximum Chlorate concentration 1500 ppm as measured at delivery location

B. PACKAGING AND SHIPPING

1. Bulk - The contractor shall deliver liquid, in tank truck lots of 3,000 to 4,000 gallons per load.

C. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
FW Site A	950,000 Gallons	Full Truckload
FW Site B	1,023,200 Gallons	Full Truckload

END OF ITEM NO. 19B

APPENDIX A

CHEMICAL REQUIREMENTS

BID ITEM NO. 20

20. SODIUM METABISULFITE

A. QUALITY/CONTENT

1. The product furnished shall have product content of a minimum 98% sodium metabisulfite free of adulterants or impurities which might cause hazards or stoppage in the operation of standard water treatment equipment.

B. PACKAGING AND SHIPPING

1. Bag the sodium metabisulfite shall be packed in durable, dust-tight 50# paper bags and shrink wrapped which will not be readily broken in handling and storage.
2. Bags shall be palletized on an "exchange" basis, delivered to the treatment plant.

C. ESTIMATED QUANTITY AND DELIVERY

Location	Estimated Total usage	Delivery amount/order
Loudoun Water*	40,000 LBS, 50# Bags	80 Bags

*Loudoun Water: Trucks must off load rear of truck; trucks must back into the facility to reach loading dock area.

END OF ITEM NO. 20

APPENDIX A
CHEMICAL REQUIREMENTS

BID ITEM NO. 21

21. SULFURIC ACID, 93%

A. GENERAL SPECIFICATIONS

This material shall be certified as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with NSF/ANSI 60, Drinking Water Treatment Chemicals—Health Effects.

1. Chemical strength shall be 93%.
2. Chemical shall be 66° Baum.

B. PACKAGING AND SHIPPING

1. Bulk - the contractor shall deliver liquid, in tank trucks and offload into storage tanks on the property.

C. ESTIMATED QUANTITY AND DELIVERY DESTINATIONS

Location	Estimated Total usage	Delivery amount/order
FW Site A	295,000 Gallons	Full Truckload

END OF ITEM NO. 21

IFB 14-16 Annual Water and Wastewater Chemical Requirements

Appendix B Weights and Shipments, Quality and Content Chemical Requirements

CAUSTIC SODA (Liquid Sodium Hydroxide)

The Members reserve the right to collect and test samples from all deliveries and to base rejection and/or gallons for payment on these tests. The Contractor's driver will be required to assist the Member's personnel in obtaining the sample if requested. If the result of the Member's analysis of the percent Na₂O concentration is 1.0 or more below the percentage of Na₂O shown on the delivery ticket by the Contractor, the Member's value will be used in the payment formula. The concentration, by weight, of Na₂O in each shipment shall be indicated on each delivery ticket. It shall be expressed as a percentage (%) and rounded to the nearest 0.01%. This shall be the actual concentration of Na₂O in the truck and not that of the concentrate from which it is prepared. The 25% Caustic Soda solution must be prepared prior to introduction into the delivery truck.

The contractor shall furnish a chart or table showing the percentage of Na₂O and NaOH for different specific gravity readings. The Member may, at its option, use this chart or table to determine the Na₂O and NaOH concentrations for some or all of its deliveries.

If a shipment is rejected, the Member may require the entire contents of the tank to which it was added, be removed and replaced by the Contractor at its sole risk and expense, including all handling and shipping charges.

Trucks used for delivery shall be of the tank-type and unloaded by a self-contained conveyance system. If the Contractor's equipment requires the use of any other types of connections, other than the existing connection, his carrier must provide the required connection and remove it after each delivery. Delivery to more than one tank at each facility may be required at each delivery at no extra cost to the Member.

The following formula will be used for payment:

$$\text{Dry tons of Sodium Hydroxide (NaOH)} = \frac{W \times C}{2,000 \times 0.76} = \frac{W \times C}{1,520}$$

Where W = net wet (lbs.) of the Liquid Sodium Hydroxide shipment and C = the actual percentage concentration of Na₂O in the shipment expressed as a decimal. If no concentration is indicated on the delivery ticket, a concentration of 18.60% will be used unless the Members testing indicates a lower concentration, in which case the Member's results will be used. If the Contractor indicates a range of concentration on the delivery ticket, the lower end of the range will be used unless the Members test results indicate a

value that is 1.0 or more below the concentration shown on the delivery ticket, in which case the Member's test results will be used. The dry tons will be rounded to the nearest 0.01 ton; W to the nearest 10 pounds, C to the nearest 0.01%. The rounding shall be in accordance with the following rule: > 5 round up; ≤ 5 round down.

Caustic soda, liquid, to conform to AWWA Standard B-501-93 or later. Except as may be modified by the following requirements or by Specific Conditions of this Contract:

- A. A minimum of 24% maximum-26% anhydrous sodium hydroxide, NaOH for the 25% product; 49% -51% range for the 50% product.
- B. It shall not contain particles of sand, grit or gelatinous material in sizes that will clog metering pumps and appurtenances nor impurities causing harmful or deleterious effects upon biosolids or receiving waters.
- C. It shall not have a temperature in excess of 104 °F upon delivery unless a higher temperature is approved by the Plant Superintendent.
- D. It shall not contain particles of sand, grit or gelatinous material in sizes that will clog metering pumps and appurtenances nor impurities causing harmful or deleterious effects upon biosolids or receiving waters.
- E. It shall have a specific gravity at 60° F of 1.278 for the 25% product, and 1.530 for the 50% product.
- F. It shall have a boiling point of 234°F. (25%)
- G. It shall have a freezing point of 0°F (25%)
- I. It shall have a viscosity at 60°F of 9.8 cp.

HYDROFLUOSILICIC ACID

Payments will be made for the total wet tons of 23% Hydrofluosilicic Acid (H_2SiF_6) contained in each shipment. Payment will be made within 30 days after each shipment of Hydrofluosilicic Acid has been received and accepted.

The following formula will be used for payment:

$$\text{Wet tons of 23\% Hydrofluosilicic Acid} = \frac{W \times C / 0.23}{2,000}$$

Where W = net wet (lbs.) of the Hydrofluosilicic Acid shipment, and C = the actual percentage concentration of H_2SiF_6 in the shipment expressed as a decimal. If no concentration is indicated on the delivery ticket, a concentration of 23% will be used unless testing indicates a lower concentration, in which case those results will be used. If the Contractor indicates a range of concentration on the delivery ticket, the lower end of the range will be used. The wet tons will be rounded to the nearest 0.01 ton; W to the nearest 10 pounds, C to the nearest 0.01%. The rounding shall be in accordance with the following rule: > 5 round up; ≤ 5 round down.

POLYALUMINUM CHLORIDE

Payments will be made for the total weight dry tons of Polyaluminum Chloride (PACl) expressed as Al_2O_3 contained in each delivery or shipment. Payment will be made within 30 days after with each shipment of Liquid PACl has been received and accepted.

The following formula will be used for payment:

$$\text{Dry tons of Polyaluminum Chloride (PACl)} = \frac{W \times C}{2,000}$$

Where, W = net wet (lbs.) of Liquid Polyaluminum Chloride (PACl) in the shipment, and C = the actual percentage concentration of Aluminum Al_2O_3 in the shipment expressed as a decimal. If the Contractor indicates a range of concentration on the delivery ticket, the lower end of the range will be used. The dry tons will be rounded to the nearest 0.001 ton; W to the nearest 10 pounds, C to the nearest 0.01%. The rounding shall be in accordance with the current edition of the standard Methods for Examination of Water and Wastewater.

A certified statement stating that the Contractor has the ability to supply up to a total of six (6) dry tons/day of Polyaluminum Chloride (PACl) (Al_2O_3) on a continuous basis if needed is required.

A statement that the Contractors source of Polyaluminum Chloride (PACl) (Al_2O_3) has been regularly and actively engaged in manufacturing commercially available drinking water treatment quality Polyaluminum Chloride (PACl) (Al_2O_3) for a minimum of three years is required.

QUICKLIME

If any delivery is found to fail to comply with the specifications, after it has been put into the bulk storage silos, and if the Member does not require the Contractor to remove the rejected delivery (and the stored Quicklime it contaminates) a 20% reduction in payment shall be made. In this event, no adjustments based on an available calcium oxide shall be applicable.

If a shipment is rejected, the Member may require the entire contents of the tank to which it was added, be removed and replaced by the Contractor at his expense, including all handling and shipping charges.

Trucks used for delivery shall be of the tank-type and unloaded by a self-contained conveyance system. If the Contractor's equipment requires the use of any other types of connections, other than the existing connection, his carrier must provide the required connection and remove it after each delivery.

The Contractor's delivery equipment must be able to furnish an air unloading pressure adequate to safely fill the storage silos. The driver shall be required to regulate the pressure to avoid objectionable amounts of dust and excessive wear on the fill lines. The driver must monitor alarms at the unloading station. The Contractor shall be responsible for cleaning the fill lines, if they become clogged during the unloading process due to the negligence of the Contractor, or his carrier, at no expense to the Member.

After receipt of a telephone request, the Contractor shall complete delivery within 48 hours.

IFB 14-16
ANNUAL WATER AND WASTEWATER CHEMICALS
ATTACHMENT 2
BID SUBMISSION FORM

INITIAL CONTRACT PERIOD: FEBRUARY 1, 2015 TO JANUARY 31, 2016

COMPANY NAME: _____

ADDRESS: _____

DISPATCH TEL: _____

DISPATCH FAX: _____

DISPATCH E-MAIL: _____

CONTACT FOR ORDER PLACEMENT: _____

Item No.	Chemical	Unit of Measure	Total Quantity	Delivery Days ARO	Manufacturer	Brand	Unit Price	Total Price	PPI DESIGNATION
1	Ammonium Hydroxide, Dry, 19%	Pound	365,000						
2	Calcium Thiosulfate, 24%	Ton	100						
3A	Caustic Soda, Dry, 25%	DST	290						
3B	Caustic Soda, Dry, 50%, Bulk	DST	1,330						
3C	Caustic Soda, 50%, Totes	Tons	32						
4	Copper Sulfate Pentahydrate (Liquid) SCI-62	Gallon	4,600						
5	Copper Sulfate (50# Bags)	Ton	25						
6	Ferric Chloride	Ton	1,800						
7	Hydrofluosilicic Acid, 23%	Ton	1,265						
8	Lime Hydrated	Ton	310						
9	Methanol (Methyl Alcohol)	Gallon	250,000						
10A	Muriatic Acid, Bulk	Gallon	1,000						
10B	Muriatic Acid, Totes	Ton	6						

COMPANY NAME: _____

Item No.	Chemical	Unit of Measure	Total Quantity	Delivery Days ARO	Manufacturer	Brand	Unit Price	Total Price	PPI DESIGNATION
11A	Oxygen, Liquid	CCF	2,035,920						
11B	Oxygen, Liquid NSF Certification Not Required	CCF	300,000						
12	Pebble Quicklime	Ton	1,000						
13	Phosphoric Acid, 75%	Ton	547						
14	Polyaluminum Chloride	Dry Ton	1,904						
15A	Polymer, Cationic Liquid (Bulk) QUALIFIED PRODUCTS ONLY	Ton	220						
15B	Polymer, Liquid, Non-ionic Polymer (Totes) QUALIFIED PRODUCTS ONLY	Ton	6						
15C	Polymer, Liquid, Cationic Dewatering (Bulk) QUALIFIED PRODUCTS ONLY	Ton	100						
16A	Potassium Permanganate, Bulk	Ton	25						
16B	Potassium Permanganate, Cycle Bin	Ton	122						
17A	Powder Activated Carbon, Bulk	Ton	50						
17B	Powder Activated Carbon, Tote Sacks	Ton	50						
17C	Powder Activated Carbon, 50# Bags	Ton	26						
17D	Powder Activated Carbon, Bulk - EMERGENCY SUPPLY	Ton	50						
17E	Powder Activated Carbon, Tote Sacks - EMERGENCY SUPPLY	Ton	50						
18A	Sodium Bisulfite, Bulk	Gallon	175,000						
18B	Sodium Bisulfite, Totes	Gallon	2,200						

Item No.	Chemical	Unit of Measure	Estimated Total Quantity	Delivery Days ARO	Manufacturer	Brand	Unit Price	Total Price	PPI DESIGNATION
19A	Sodium Hypochlorite, 15%	Gallon	2,738,800						
19B	Sodium Hypochlorite, 15%B - MAX CHLORATE 1500 PPM	Gallon	1,973,200						
20	Sodium Metabisulfite	LBS	40,000						
21	Sulfuric Acid	Gallon	295,000						

COMPANY NAME: _____

CONTACT: _____

TERMS: Terms are Net 30. A prompt payment discount of _____ % is offered for all payments made within _____ days after receipt of a valid invoice at FYV Accounts Payable Department. Note, offers of prompt payment discounts will not be considered in evaluating this solicitation.

Are MSDS, NSF-60 certs., ANSII/WWA docs, etc attached? _____ YES _____ NO

Pursuant to Title 13.1 or Title 50 of the Virginia Code provide the identification number issued to your firm by the Virginia State Corporation Commission (VSCC) in the space provided below. If your firm is not required to be authorized to transact business under Title 13.1 or Title 50, or any other law; provide a statement why your firm is not required to be so authorized.

Company Name Identification Number

If you do not have a VSCC identification number, explain why it is not required in the space below:

By my signature I certify that I am acting as an agent for the above listed firm and am fully authorized to bind the firm to the terms, conditions and specifications of this solicitation, as well as any addenda thereto.

Signature: _____ Printed Name: _____ Title: _____

Telephone #: _____ E-mail: _____ FEDERAL ID #: _____