

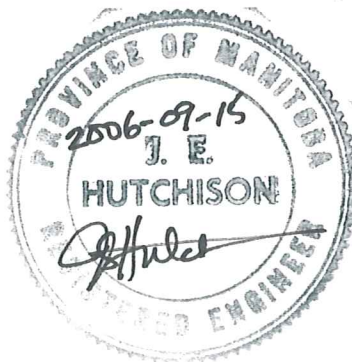


**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 583-2006**

**SUPPLY AND DELIVERY OF LIQUID FERRIC CHLORIDE TO THE PHOSPHORUS  
REMOVAL FACILITY AT THE NORTH END WATER POLLUTION CONTROL  
CENTRE**



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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 SUPPLY AND DELIVERY OF LIQUID FERRIC CHLORIDE TO THE PHOSPHORUS REMOVAL FACILITY AT THE NORTH END WATER POLLUTION CONTROL CENTRE

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, September 29, 2006.

B2.2 Bid Submissions determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

### **B3. SITE INVESTIGATION**

B3.1 Further to GC.2.01, the Bidder may make an appointment to view the Site by contacting the Contract Administrator.

B3.2 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

### **B4. ENQUIRIES**

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

### **B5. ADDENDA**

B5.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.

B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

## **B6. SUBSTITUTES**

B6.1 The Work is based on the materials, equipment, methods and products specified in the Bid Opportunity.

B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least seven (7) Business Days prior to the Submission Deadline.

B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:

- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the material, equipment, method or product as either an approved equal or alternative;
- (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
- (c) identify any anticipated cost or time savings that may be associated with the substitute;
- (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract;
- (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract.

B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.

B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.

B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.

B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.

B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative shall base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.

B6.9 No later claim by the Contractor for an addition to the price(s) because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

**B7. BID SUBMISSION**

- B7.1 The Bid Submission consists of the following components:
- (a) Form A: Bid;
  - (b) Form B: Prices.
- B7.2 All components of the Bid Submission shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Bid.
- B7.3 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.4 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg  
Corporate Finance Department  
Materials Management Branch  
185 King Street, Main Floor  
Winnipeg MB R3B 1J1
- B7.4.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.5 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.
- B7.5.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B7.6 Bid Submissions submitted by internet electronic mail (e-mail) will not be accepted.

**B8. BID**

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;

- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.

B8.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.

B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid Submission and the Contract, when awarded, shall be both joint and several.

## **B9. PRICES**

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.1.1 Prices on Form B: Prices shall include:

- (a) duty;
- (b) freight and cartage;
- (c) Provincial and Federal taxes [except the Goods and Services Tax (GST) and Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable] and all charges governmental or otherwise paid;
- (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.

B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

## **B10. QUALIFICATION**

B10.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business;
- (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
- (c) be financially capable of carrying out the terms of the Contract;
- (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
- (e) have successfully carried out work, similar in nature, scope and value to the Work;
- (f) employ only Subcontractors who:
  - (i) are responsible and not suspended, debarred or in default of any obligation to the City (a list of suspended or debarred individuals and companies is available on the

Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>); and

- (ii) have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract;
  - (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba).
- B10.2 The Bidder shall be prepared to submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B10.3 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

### **B11. OPENING OF BIDS AND RELEASE OF INFORMATION**

- B11.1 Bid Submissions will not be opened publicly.
- B11.2 After the Submission Deadline, the names of the Bidders and their bid prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B11.4 The Bidder is advised that any information contained in any Bid Submission may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

### **B12. IRREVOCABLE BID**

- B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B12.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

### **B13. WITHDRAWAL OF BIDS**

- B13.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B13.1.1 Notwithstanding GC.7.05(2), the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
  - B13.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
  - B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials shall:

- (a) retain the Bid Submission until after the Submission Deadline has elapsed;
- (b) open the Bid Submission to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.

B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

#### **B14. EVALUATION OF BIDS**

B14.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B6.

B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements if the interests of the City so require.

B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid Submission or in other information required to be submitted, that he is responsible and qualified.

B14.4 Further to B14.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

B14.5 This Contract will be awarded as a whole.

#### **B15. AWARD OF CONTRACT**

B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or



(e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.

B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

B15.4 Notwithstanding GC.3.01 and GC.3.02, the City will issue a purchase order to the successful Bidder in lieu of the execution of a Contract.

B15.5 The Contract Documents, as defined in GC.1.01(7), in their entirety shall be deemed to be incorporated in and to form a part of the purchase order notwithstanding that they are not necessarily attached to or accompany said purchase order.

## **PART C - GENERAL CONDITIONS**

### **C1. GENERAL CONDITIONS**

C1.1 The *General Conditions for the Supply and Delivery of Goods* (Form 21: 88 03) are applicable to the Work of the Contract.

C1.1.1 The *General Conditions for the Supply and Delivery of Goods* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

## PART D - SUPPLEMENTAL CONDITIONS

### GENERAL

#### D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for the Supply and Delivery of Goods*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Board of Commissioners" or "Commissioner" wherever it appears in the General Conditions and substituting the "Chief Administrative Officer".
- D1.4 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.5 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.6 The General Conditions are amended by striking out "Bidding Instructions" wherever it appears in the General Conditions and substituting "Bidding Procedures".

#### D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of the supply and delivery of liquid ferric chloride for the period of November 1, 2006 to June 30, 2008.
- D2.1.1 Notwithstanding D2.1, the Contractor will be allowed twenty (20) Calendar Days from the date of award to deliver a first shipment of not less than 4000 kg of soluble iron.
- D2.2 The Work shall be done on an "as required" basis during the term of the Contract.
- D2.2.1 The type and quantity of Work to be performed under this Contract shall be as authorized from time to time by the Contract Administrator and/or Users.
- D2.2.2 Subject to GC.4.08, the City shall have no obligation under the Contract to purchase any quantity of any item in excess of its actual operational requirements.
- D2.2.3 The Phosphorus Removal Facility is new and the City expects to increase ferric chloride usage during the term of the Contract. The approximate quantity identified on Form B: Prices assumes operation at 20% of design capacity for 4 months, 40% of design capacity for 4 months, 60% of design capacity for 4 months and 100% of design capacity for 8 months.

#### D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
- (a) "**ANSI**" means American National Standards Institute;
  - (b) "**Award Authority**" means the authority having the jurisdiction to award the Contract according to the City's by-laws, policies or procedures;
  - (c) "**AWWA**" means American Water Works Association;
  - (d) "**Business Day**" means any Calendar Day, other than a Saturday, Sunday, or a Statutory or Civic Holiday;
  - (e) "**CPR**" means Canadian Pacific Railway;
  - (f) "**Driver**" means an individual delivering liquid ferric chloride by truck;

- (g) "**NEWPCC**" means North End Water Pollution Control Centre, 2230 Main Street, Winnipeg, Manitoba;
- (h) "**Operator**" means an employee of the City authorized to unload, or assist in the unloading of, liquid ferric chloride at the NEWPCC;
- (i) "**Submission Deadline**" and "**Time and Date Set for the Final Receipt of Bids**" mean the time and date set out in the Bidding Procedures for final receipt of Bids;
- (j) "**User**" means a person, department or other administrative unit of the City authorized by the Contract Administrator to order Work under this Contract.

#### **D4. CONTRACT ADMINISTRATOR**

D4.1 The Contract Administrator is Earth Tech (Canada) Inc., represented by:

Mr. Eric Hutchison, P.Eng.  
Senior Project Manager  
850 Pembina Highway  
Winnipeg MB R3M 2M7  
Telephone No. (204) 477-5381  
Facsimile No. (204) 284-2040

#### **D5. NOTICES**

D5.1 GC.7.05 is hereby amended to delete reference to "registered mail" and to replace same with "ordinary mail".

D5.2 GC.7.05 is further amended hereby to include delivery by facsimile transmission (fax) as an acceptable means of delivering notices, consents, approvals, statements, authorizations, documents or other communications required or permitted to be given under this Contract. Deliveries by fax will be deemed to have been received on the day of delivery, if a business day, or if not a business day, on the business day next following the day of delivery.

D5.3 Further to GC.7.05, all notices, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.4, D5.5 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.

D5.4 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:

The City of Winnipeg  
Chief Administrative Officer Secretariat  
Administration Building, 3rd Floor  
510 Main Street  
Winnipeg MB R3B 1B9  
Facsimile No.: (204) 949-1174

D5.5 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

The City of Winnipeg  
Corporate Services Department  
Legal Services Division  
185 King Street, 3rd Floor  
Winnipeg MB R3B 1J1  
Facsimile No.: (204) 947-9155

## **SUBMISSIONS**

### **D6. AUTHORITY TO CARRY ON BUSINESS**

D6.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

### **D7. INSURANCE**

D7.1 The Contractor shall provide and maintain Commercial General Liability insurance, in the amount of at least five million dollars (\$5,000,000.00) inclusive. The said Commercial General liability insurance shall include coverage for products and completed operations, blanket contractual liability, cross liability and/or severability of interest, non owned automobile liability, and shall include The City of Winnipeg as an additional insured. This insurance coverage is to remain in place at all times throughout the duration of the Contract.

D7.2 The Contractor shall provide and maintain Automobile Liability insurance for owned automobiles used for or in connection with the work in the amount of at least five million dollars (\$5,000,000.00).

D7.3 The certificate of insurance must expressly state: "operations to include supply and delivery of Liquid Ferric Chloride".

D7.4 The Contractor shall provide the Contract Administrator with a certificate of insurance of the policy at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract. The certificate must detail all insurance requirements.

D7.5 Deductibles shall be borne by the Contractor.

D7.6 The Contractor, shall not cancel, materially alter, or cause the policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

### **D8. MATERIAL SAFETY DATA SHEETS**

D8.1 The Contractor shall provide the Contract Administrator with one (1) copy of Material Safety Data Sheets (MSDS's) for each product to be supplied under the Contract at least two (2) Business Days prior to the commencement of Work but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D8.2 Throughout the term of the Contract, the Contractor shall provide the Contract Administrator with revisions or updates of the MSDS's as soon as may be reasonably possible

## **CONTROL OF WORK**

### **D9. COMMENCEMENT**

D9.1 The Contractor shall not commence any Work until he is in receipt of a purchase order from the Award Authority authorizing the commencement of the Work.

D9.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
  - (i) evidence of authority to carry on business specified in D6;
  - (ii) evidence of the insurance specified in D7; and

- (iii) the Material Safety Data Sheets specified in D8.
- (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

#### **D10. ORDERS**

- D10.1 The Contractor shall provide a local Winnipeg telephone number or a toll-free telephone number at which orders for delivery may be placed.

#### **MEASUREMENT AND PAYMENT**

#### **D11. INVOICES**

- D11.1 Further to GC.9.01 and notwithstanding GC.9.03, the Contractor shall submit an invoice for each order delivered.
- D11.2 Further to D5.3, the Contractor shall submit invoices to the locations designated at the time of ordering.
- D11.3 Invoices must clearly indicate, as a minimum:
- (a) the City's order number (Purchase Order);
  - (b) date of delivery;
  - (c) delivery address;
  - (d) type and quantity of goods delivered;
  - (e) a calculation showing total soluble iron based on the analysis for the shipment;
  - (f) the amount payable with GST and MRST shown as separate amounts; and
  - (g) the Contractor's GST registration number.
- D11.4 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

#### **D12. PAYMENT**

- D12.1 Further to GC.9.01 and GC.9.03, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

## PART E - SPECIFICATIONS

### GENERAL

#### E1. GENERAL

E1.1 These Specifications shall apply to the Work.

E1.2 The following Drawings are provided for the information of the Bidder.

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
FC-1	Civil – Site Layout and Access
FC-2	Process – Railcar Shelter and Chemical Storage Building – Plan and Sections
FC-3	Instrumentation – Chemical Receiving – Process and Instrumentation Diagram
FC-4	Instrumentation – Chemical Storage and Containment – Process and Instrumentation Diagram

#### E2. LIQUID FERRIC CHLORIDE

E2.1 The Contractor shall supply Item No. 1 – Liquid Ferric Chloride in accordance with the following requirements:

(a) Total soluble iron as Fe	9.6 – 16.2% wt/wt
(b) Ferrous Iron (Fe <sup>2+</sup> )	Max. 2.5% wt/wt
(c) Acidity (free acid as HCl)	Max. 1.0% wt/wt
(d) Total insoluble matter	Max. 0.2% wt/wt
(e) Aluminum	Max. 1750 mg/kg
(f) Arsenic	Non Detectable
(g) Cadmium	Max. 1 mg/kg
(h) Chromium	Max. 60 mg/kg
(i) Copper	Max. 15 mg/kg
(j) Lead	Max. 75 mg/kg
(k) Manganese	Max. 1200 mg/kg
(l) Mercury	Non Detectable
(m) Molybdenum	Max. 25 mg/kg
(n) Nickel	Max. 11 mg/kg
(o) Selenium	Max. 1 mg/kg
(p) Zinc	Max. 120 mg/kg

E2.2 The Contractor shall submit with each shipment a certified analysis showing the concentration of each element or compound identified in E2.1.

E2.2.1 Unless otherwise approved by the Contract Administrator, test methods and procedures shall be in accordance with the requirements of ANSI/AWWA B407-05 except that samples shall be taken during or prior to loading.

#### E3. DELIVERY

##### General

E3.1 Liquid ferric chloride shall be delivered on an "as required" basis during the term of the Contract, f.o.b. destination, freight prepaid, to the NEWPCC.

- E3.1.1 Liquid ferric chloride shall be delivered within fifteen (15) Calendar Days of the placing of an order, unless otherwise allowed by the User at the time of ordering.
- E3.2 Liquid ferric chloride shall be loaded at a temperature such that the temperature will not drop to below the crystallization point during transportation in cold weather.
- E3.3 The Phosphorus Removal Facility at the NEWPCC is equipped to receive delivery by either rail (CPR Winnipeg Beach Subdivision Mile 3.44) or by truck.
- E3.3.1 The Contractor may select the method of delivery but is advised that, with respect to GC.8.04(4), inability to deliver by his preferred method shall not constitute an acceptable reason for delay if delivery by the alternative method is feasible.
- E3.3.2 Unless the Contractor is prevented by the City from using his preferred delivery method, the Contractor shall bear any additional costs associated with delivery by an alternative method.

### **Delivery by Rail**

- E3.4 If delivery is by rail, the Contractor is responsible for delivery of each railcar into the Railcar Shelter and providing notification of same to the User.
- E3.5 An Operator will unload liquid ferric chloride from the railcar to the City's storage tanks.
- E3.6 The City will provide the following facilities at the unloading platform in the railcar shelter for the connection of compressed air and chemical unloading line:
- (a) one 1" Chicago fitting for compressed air;
  - (b) one 3" four-bolt PVC flange for the liquid ferric chloride;
  - (c) reasonable storage space for the Contractor's equipment (see E3.7).
- E3.7 The Contractor shall provide any additional equipment required, including but not limited to:
- (a) one air valve assembly, connecting the air hose and the railcar, to suit the railcar;
  - (b) one 1" compressed air hose approximately 3.3 to 3.6 metres long, with 1" Chicago fitting at one end suitable to connect to the City's compressed air fitting. The other end of the hose shall connect to the Contractor's air valve assembly by Chicago fittings, flanges or other means.
  - (c) one chemical port, connecting the chemical hose and the railcar, to suit the railcar;
  - (d) one 3" chemical hose approximately 3.3 to 3.6 metres long, with 3" flange at one end suitable to connect to the City's chemical unloading line. The other end of the hose shall connect to the railcar chemical port by flanges or other means.
  - (e) straps or other securing devices to fasten the air valve assembly and the chemical port to prevent the blow-out;
  - (f) two sets of sample collection equipment;
  - (g) any other accessories required for compressed air railcar unloading operation.
- E3.7.1 If different railcars require different connections, the Contractor shall provide suitable adapters.
- E3.8 Upon notification by the User that a railcar is released for removal, the Contractor is responsible for the prompt removal of the railcar.

### **Delivery by Truck**

- E3.9 If delivery is by truck, liquid ferric chloride shall be delivered between 8:00 a.m. and 4:00 p.m. on Business Days.



- E3.10 The Driver shall unload liquid ferric chloride from trucks to the City's storage tanks with the assistance of an Operator.
- E3.11 Each truck shall be equipped with its own unloading system (typically air padding) which is manually controlled by the Driver.
- E3.12 Unloading shall be in accordance with the Contractor's procedures. The following procedure is intended to identify minimum requirements and to outline responsibility for tasks:
- (a) The Operator verifies that valve WV-701B in the unloading line, valve WV-696F in the bleeding air line and valve WV-707 are fully closed, and that valve WV-701F is fully opened.
  - (b) The Operator closes the valve on the outlet of the catch basin in the land drainage sewer.
  - (c) The Operator removes the cover over the spill sump under the unloading connection outside the railcar shelter.
  - (d) The control system turns on the "READY TO UNLOAD" indicator when the total available spare capacity in both storage tanks is greater than a preset volume (enough to accommodate full truck/trailer volume plus safety margin).
  - (e) The Operator manually verifies the tank liquid level readings on the unloading control panel.
  - (f) The Driver manually vents any built-up pressure or vacuum from the truck.
  - (g) The Driver manually connects the liquid discharge hose to the truck.
  - (h) The Driver manually opens the isolation valve (WV-702) for the liquid line.
  - (i) The Operator initiates unloading by pressing the START button.
  - (j) The control system opens the valve (WV-705 or WV-706) for the tank(s) to be filled.
  - (k) The Driver starts the truck-mounted unloading compressed air system.
  - (l) The system allows simultaneous filling of both storage tanks. When one tank is full, its inlet valve closes and filling continues in the other tank.
  - (m) During unloading, the Driver monitors the liquid level in the tank, flow rate, etc. on the control panel, and the pressure reading for the unloading pump or compressor mounted in the truck. If the pressure increases to an unreasonable degree indicating a blockage of the strainer, the Driver alerts the Operator for further checks.
  - (n) Unloading normally continues until the truck is empty. The Driver then manually stops the compressed air system.
  - (o) When the truck is empty, air pressure blows out the transfer lines resulting in the flow reading (FE-W701) dropping to zero together with a drop in unloading air pressure (monitored on the truck). At this time, the control system detects the empty truck and closes the tank inlet valve(s).
  - (p) Unloading can be manually stopped in progress, or when complete, by pressing the Emergency Stop Device (ESD) button at either of the local panels, at the platform, or in the railcar building. This action immediately closes the storage tank inlet valve(s) and initiates an alarm.
  - (q) The control system, upon detecting high level in either of the storage tanks, initiates alarm and shutdown.
  - (r) The control system detecting failure or non-responsiveness of a control valve initiates alarm and shutdown.
  - (s) Resuming unloading after an emergency stop or safety shutdown may require bypassing of the "READY TO UNLOAD" interlock. The control system does not turn on the "READY TO UNLOAD" light because the tank level(s) may no longer be low enough. In this case, the Distributed Control System (DCS) operator is provided with a non-latching override for the "READY TO UNLOAD" permissive. Unloading is resumed by pressing the local start button again and restarting the blower if it was stopped.

- (t) The Driver isolates and disconnects the liquid and air lines at this time, ensuring that the system is fully vented prior to disconnecting.
- (u) The Driver closes the isolation valve (WV-702) and disconnects the chemical line.
- (v) The Driver locks out or isolates the truck-mounted compressed air system.
- (w) Once unloading is completed, the Driver opens the gate valve in the Land Drainage Sewer (LDS) line from the catch basin.
- (x) If there are any chemical drips or leaks the Driver flushes it to the spill sump with water. In the winter, flushing water is not used and instead lime is applied to the spill.
- (y) The Driver replaces and tightens the spill sump cover.

#### **E4. DEMURRAGE**

- E4.1 For delivery by rail, the Unit Price for Item 1 – Liquid ferric chloride shall include an allowance for the City to have each rail car in its possession for a period of four (4) Calendar Days.
- E4.2 The Unit Price for Item 2 – Demurrage Charge shall be the demurrage charge applicable for each Calendar Day in excess of four (4) Calendar Days that the City retains possession of a rail car.
  - E4.2.1 If no Unit Price is identified, no demurrage charge shall apply. The Bidder is advised to stipulate an amount if any portion of the deliveries may be by rail.
  - E4.2.2 The length of time a railcar is deemed to be in the possession of the City shall be from the time that a rail car is spotted for unloading and the City is so notified, to the time the City notifies the Contractor the railcar is released for removal. Demurrage shall not accrue as a result of a delay in removal by the Contractor.

#### **E5. TRAINING**

- E5.1 The Contractor shall provide training for City staff.
- E5.2 Training shall include written materials, on-site classroom sessions and “hands-on” training addressing:
  - (a) specific hazards of liquid ferric chloride;
  - (b) personal protective equipment and safety procedures;
  - (c) unloading procedures for both railcar and truck.
- E5.3 Training sessions should include a test with a pass/fail in terms of continuing education units in the Province of Manitoba.
- E5.4 The Contractor shall coordinate training dates with the contractor that is constructing the Railcar Shelter and Chemical Storage Building. Information regarding the construction contract, Bid Opportunity No. 611-2005, is available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/finance/findata/matmgt/bidres/Past/2006.asp>.
- E5.5 At the commencement of the Contract, classroom training shall be provided to four (4) shifts of approximately ten (10) persons each in four separate sessions approximately one week apart.
  - E5.5.1 The City will provide a suitable room at the NEWPCC and audio visual equipment for training.
- E5.6 For delivery by railcar, “hands-on” training shall be provided for all four shifts in conjunction with the first deliveries by railcar practicable in relation to shift schedules.

- E5.7 For delivery by truck, "hands-on" training shall be provided for one shift at a time in conjunction with the first deliveries by truck practicable in relation to shift schedules.
- E5.8 If, during the term of the Contract, the Contractor chooses to change equipment or method of delivery and unloading, the Contractor shall provide any reasonably necessary additional training at no cost to the City.
- E5.9 During the last six months of the Contract, at a time selected by the Contract Administrator, the Contractor shall provide a fifth training session for new staff hired or transferred since the initial training sessions.
- E5.10 Training sessions may be video recorded. The material may be edited and supplemented to provide a permanent record for the City's use.