



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 363-2011**

**PROVISION OF LABORATORY TESTING SERVICES**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 PROVISION OF LABORATORY TESTING SERVICES

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, June 21, 2011.

B2.2 Bids 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. ENQUIRIES**

B3.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B3.2 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 promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B3.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.

B3.4 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.

B3.5 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.

B3.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

### **B4. ADDENDA**

B4.1 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.

B4.2 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.

B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B4.3 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.

## **B5. SUBSTITUTES**

- B5.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B5.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B5.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B5.4 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 Plant, Material or method 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.
- B5.5 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.
- B5.6 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.
- B5.6.1 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.
- B5.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B5.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may 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 B13.
- B5.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B5.10 Notwithstanding B5.2 to B5.9, and in accordance with B6.5, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B13.1(a).

## **B6. BID SUBMISSION**

- B6.1 The Bid shall consist of the following components:

- (a) Form A: Bid;
- (b) Form B: Prices.

- B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.
- B6.3 All components of the Bid 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, to constitute a responsive Bid.
- B6.4 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.5 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B13.1(a).
- B6.6 The Bid may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B6.7 If the Bid 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 Division  
185 King Street, Main Floor  
Winnipeg MB R3B 1J1
- B6.7.1 Samples or other components of the Bid 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.
- B6.8 If the Bid is submitted by facsimile transmission, it shall be submitted to (204) 949-1178
- B6.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B6.9 Bids submitted by internet electronic mail (e-mail) will not be accepted.

**B7. BID**

- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 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.
- B7.2.1 If a Bid is submitted jointly by two (2) or more persons, each and all such persons shall identify themselves in accordance with B7.2.
- B7.3 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.
- B7.4 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.

B7.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B7.5 If a Bid is submitted jointly by two (2) 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 and the Contract, when awarded, shall be both joint and several.

## **B8. PRICES**

B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B8.1.1 Notwithstanding C11.1.1, prices on Form B: Prices shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

B8.2 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.

B8.3 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.

B8.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

## **B9. QUALIFICATION**

B9.1 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; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
- (d) have employees with a degree or diploma in a science related field, perform the analysis;

B9.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations 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 Division website at <http://www.winnipeg.ca/matmgt/debar.stm>

- B9.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
  - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
  - (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba).
- B9.4 The Bidder shall 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.
- B9.5 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.

#### **B10. OPENING OF BIDS AND RELEASE OF INFORMATION**

- B10.1 Bids will not be opened publicly.
- B10.2 Following the Submission Deadline, the names of the Bidders and their Total Bid price awarded as a whole (Alternative 1) and separately in sections (Alternative 2) 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 Division website at <http://www.winnipeg.ca/matmgt>
- B10.3 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 Division website at <http://www.winnipeg.ca/matmgt>
- B10.4 The Bidder is advised that any information contained in any Bid 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.

#### **B11. IRREVOCABLE BID**

- B11.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B11.2 The acceptance by the City of any Bid shall not release the Bids of the next two (2) 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.

#### **B12. WITHDRAWAL OF BIDS**

- B12.1 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.
- B12.1.1 Notwithstanding C22.5, 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.
- B12.1.2 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.



- B12.1.3** If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
  - (b) open the Bid 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 B12.1.3(b), declare the Bid withdrawn.
- B12.2** A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B11.2 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.

### **B13. EVALUATION OF BIDS**

- B13.1** 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, or acceptable deviation therefrom (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 (pass/fail);
  - (c) Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B5;
  - (e) costs to the City of administering multiple contracts.
- B13.2** Further to B13.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid 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 or minor informalities or irregularities if the interests of the City so require.
- B13.3** Further to B13.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B13.4** Further to B13.1(c), the Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B13.5** This Contract may be awarded as a whole (Alternative 1) or separately in sections (Alternative 2) as identified on Form B: Prices.
- B13.5.1** Notwithstanding B8.1, the Bidder may, but is not required to, bid on both alternatives, or on any one or more sections in Alternative 2.
- B13.5.2** Notwithstanding B14.3, the City shall not be obligated to award any section to the responsible Bidder submitting the lowest evaluated responsive Bid for that section and shall have the right to choose the alternative which is in its best interests. If the Bidder has not bid on both alternatives or on all sections in Alternative 2, he shall have no claim against the City if his partial Bid is rejected in favour of an award of the Contract on the basis of an alternative or section upon which he has not bid.

### **B14. AWARD OF CONTRACT**

- B14.1** The City will give notice of the award of the Contract or will give notice that no award will be made.

- B14.2 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.
- B14.2.1 Without limiting the generality of B14.2, 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.
- B14.3 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 in accordance with B13.
- B14.3.1 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.
- B14.4 Notwithstanding C4.1, the City will issue a purchase order to the successful Bidder in lieu of the execution of a Contract.
- B14.5 The Contract Documents, as defined in C1.1 (n) (ii), 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**

### **C0. GENERAL CONDITIONS**

- C0.1 The *General Conditions for Supply of Services* (Revision 2007 04 12) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Supply of Services* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at [http://www.winnipeg.ca/matmgt/gen\\_cond.stm](http://www.winnipeg.ca/matmgt/gen_cond.stm)
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Supply of Services*.

## PART D - SUPPLEMENTAL CONDITIONS

### GENERAL

#### D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Supply of Services*, these Supplemental Conditions are applicable to the Work of the Contract.

#### D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of provision of laboratory testing services for the period from July 1, 2011 until April 30, 2012, with the option of four (4) mutually agreed upon one (1 ) year extensions.

D2.1.1 The City may negotiate the extension option with the Contractor within sixty (60) Calendar Days prior to the expiry date of the Contract. The City shall incur no liability to the Contractor as a result of such negotiations.

D2.1.2 Changes resulting from such negotiations shall become effective on July 1<sup>st</sup> of the respective year. Changes to the Contract shall not be implemented by the Contractor without written approval by the Contract Administrator.

D2.2 The major components of the Work are as follows:

- (a) Contractor will be responsible for samples from the time they take possession from the agreed upon location;
- (b) Contractor will be responsible for prepared sample bottles until a City of Winnipeg employee takes possession from the agreed upon location;
- (c) detailed reports;
- (d) detailed and summarized invoices.

D2.3 The Work shall be done on an "as required" basis during the term of the Contract.

D2.3.1 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.

D2.3.2 Notwithstanding C7.4, the City shall have no obligation under the Contract to purchase any quantity of any item in excess of its actual operational requirements.

#### D3. DEFINITIONS

D3.1 When used in this Bid Opportunity:

- (a) "**CALA**" means Canadian Association for Laboratory Accreditation
- (b) "**cfu/mL**" means colony forming units per millilitre;
- (c) "**cfu/100mL**" means colony forming units per 100 millilitres;
- (d) "**E. coli**" means Escherichia coliform.
- (e) "**ISO/IEC**" means International Standards Organization;
- (f) "**MDL**" means method detection limit;
- (g) "**mg/kg**" means milligrams per kilogram;
- (h) "**mg/L**" means milligrams per litre;
- (i) "**MPN**" means most probable number;
- (j) "**MPNU/100mL**" means most probable number units per 100 millilitres;
- (k) "**ng/L**" means nanograms per litre;

- (l) **“open water season”** means the period beginning in spring when all the ice on the surface waters are melted until the time when ice has started to form on the surface waters where the City conducts its sampling. Typically approximately seven (7) months duration.
- (m) **“pg/L”** means picograms per litre;
- (n) **“pg/mL”** means picograms per millilitre;
- (o) **“Positive”** means a coliform result of greater than one (1);
- (p) **“µg/L”** means micrograms per litre;
- (q) **“/100L”** means per 100 litres;
- (r) **“turn around time”** means the time required to report test results from the time sample is received by Contractor;
- (s) **“User”** means a person, department or other administrative unit of the City authorized by the Contract Administrator to order Work under this Contract.

D3.2 Notwithstanding C1.1, when used in this Bid Opportunity:

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

D4.1 The Contract Administrator is:

Steve Fletcher  
Supervisor of Analytical Services  
Water and Waste Department  
Environmental Standards Division  
2230 Main Street

Telephone No.: (204) 986-4752  
Facsimile No.: (204) 986-4809  
Email: [sfletcher@winnipeg.ca](mailto:sfletcher@winnipeg.ca)

D4.2 At the pre-commencement meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

#### **D5. CONTRACTOR'S SUPERVISOR**

D5.1 Further to C6.19, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in his employ.

D5.2 Before commencement of Work, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5.2.1 Further to C5.5 Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

#### **D6. NOTICES**

D6.1 Notwithstanding C22.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

The City of Winnipeg  
Chief Financial Officer  
Facsimile No.: (204) 949-1174

## **SUBMISSIONS**

### **D7. AUTHORITY TO CARRY ON BUSINESS**

D7.1 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.

### **D8. INSURANCE**

D8.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured; such liability policy to also contain a cross-liability clause, non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work;
- (b) if required, automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00), to remain in place at all times during the performance of the Work;
- (c) Professional liability or Errors and Omissions liability insurance in the amount of at least one million dollars (\$1,000,000) per claim to remain in place at all times during the performance of the Work and throughout the warranty period.

D8.2 Deductibles shall be borne by the Contractor.

D8.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D8.4 The Contractor shall not cancel, materially alter, or cause the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

## **CONTROL OF WORK**

### **D9. COMMENCEMENT**

D9.1 The Contractor shall not commence any Work until he is in receipt of a notice of award from the City 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 D7;
  - (ii) evidence of the workers compensation coverage specified in C6.14;
  - (iii) evidence of the insurance 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. SAFETY**

D10.1 The Contractor shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.

- D10.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.
- D10.3 The Contractor shall do whatever is necessary to ensure that:
- (a) no person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
  - (b) the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of its performance;
  - (c) adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;
  - (d) adequate sanitation measures are taken and facilities provided with respect to the Work;
  - (e) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or Plant;
  - (f) fire hazards in or about the Work are eliminated.

## **D11. INSPECTION**

- D11.1 Before beginning or resuming operations upon any portion of the Work, the Contractor shall notify the Contract Administrator so as to enable him to arrange for inspection. If the Contractor fails to notify the Contract Administrator, the Contractor shall, if and when required by the Contract Administrator, forthwith take down or expose and redo that portion of the Work required to facilitate inspection. The cost of such taking down or exposure, and redoing, if any, shall be borne by the Contractor.
- D11.2 If and when required by the Contract Administrator, the Contractor shall take down or expose forthwith any portion of the Work where the Contract Administrator determines that the Work is not in accordance with the Contract. The cost of such taking down or exposure, and redoing, if any, shall fall upon the City if the taking down or exposure indicates that the portion exposed was properly performed, but if otherwise the cost shall be borne by the Contractor.

## **D12. ORDERS**

- D12.1 The Contractor shall provide a local Winnipeg telephone number or a toll-free telephone number at which orders for service(s) may be placed.

## **D13. RECORDS**

- D13.1 The Contractor shall keep detailed records of the services supplied under the Contract.
- D13.2 The Contractor shall record, as a minimum, for each item listed on Form B: Prices:
- (a) user name(s) and addresses;
  - (b) order date(s);
  - (c) service date(s); and
  - (d) description and quantity of services provided.
- D13.3 The Contractor shall provide the Contract Administrator with a copy of the usage records for each year within thirty (30) Calendar Days of the end of year one (1) and within thirty (30) Calendar Days at the end of any Contract extension period should the Contract be extended.

## MEASUREMENT AND PAYMENT

### D14. INVOICES

D14.1 Further to C11, the Contractor shall submit an invoice for each order delivered to:

The City of Winnipeg  
Corporate Finance - Accounts Payable  
4th Floor, Administration Building, 510 Main Street  
Winnipeg MB R3B 1B9

Facsimile No.: (204) 949-0864

Email: [CityWpgAP@winnipeg.ca](mailto:CityWpgAP@winnipeg.ca)

D14.2 Invoices must clearly indicate, as a minimum:

- (a) the City's purchase order number;
- (b) reference to the contract number;
- (c) date of delivery;
- (d) delivery address;
- (e) summary of type and quantity of goods delivered;
- (f) the amount payable with GST and MRST shown as separate amounts; and
- (g) the Contractor's GST registration number.

D14.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D14.4 Bids Submissions must be submitted to the address in B6.7.

### D15. PAYMENT

D15.1 Further to C11, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

D15.2 Further to C11, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

## WARRANTY

### D16. WARRANTY

D16.1 Warranty is as stated in C12.



## **PART E - SPECIFICATIONS**

### **GENERAL**

#### **E1. APPLICABLE SPECIFICATIONS**

- E1.1 These Specifications shall apply to the Work.
- E1.2 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B5.

#### **E2. SERVICES**

- E2.1 The Contractor shall supply Laboratory Testing in accordance with the requirements hereinafter specified.
- E2.2 All tests shall be done according to Environmental Protection Agency (EPA) method or 21<sup>st</sup> Standards Methods for the Examination of Water and Wastewater, or method agreed upon between the Contract Administrator and Contractor.
- E2.3 Each test that is not conducted, through human, instrument, or other error shall be reported as "No Result" or "Not Analyzed" with a corresponding explanation stated. In these cases, the City will not be charged for the sample preparation unless the prepared sample is analyzed for other parameters nor shall they be charged for testing that is not performed.
- E2.4 Test results and reports shall;
- (i) be available on the web site, with an electronic copy e-mailed to the specified address and contact person(s);
  - (ii) be made available in hard copy format and an electronic readable format such as Microsoft Excel;
  - (iii) be in accordance with the requirements outlined under section 5.10 of the ISO/IEC 17025:2005 international standard or otherwise agreed upon between the Contract Administrator and Contractor.
- E2.5 Preliminary or unofficial test results shall be available in accordance with E2.4 with the mutual understanding that the final official results may differ.
- E2.6 Notification to the Contract Administrator shall be by phone, e-mail or facsimile (fax) that preliminary results for rush analysis are available to the Contract Administrator.
- E2.7 The Contractor shall supply all the bottles required for the testing in a "ready to use" condition and have them available for pick-up by the City from the same location at the drop-off location or have the samples delivered to a location agreed upon between the Contract Administrator and Contractor.
- E2.8 The Contractor will supply the City with directions and precautions and Material Safety Data Sheets, when reagents, preservatives, or special handling is required as part of the sampling protocol.
- E2.9 The Contractor shall accept delivery of samples on Saturdays, Sundays, and statutory holidays. The Contractor shall accept delivery for consecutive hours on Saturdays, Sundays, and statutory holidays as agreed upon by the Contract Administrator. Statutory holidays must be agreed upon at a later date, but within forty-eight (48) hours of the holiday.
- E2.10 All Bacteriological test methods, (Total Coliform, Fecal Coliform, E. Coli) shall commence the same day that samples are received, conditional that the City has met the agreed upon submission deadline and 24 hrs, when the City has missed the deadline.
- E2.11 Emergency testing shall commence within twenty-four (24) hours of sample delivery.

- E2.12 The Contractor shall have a contact person(s) and phone number that the City can contact at anytime for emergency purposes.
- E2.13 The Contractor shall be currently accredited and maintain status of accreditation for the duration of the contract as per ISO:17025;2005, General Requirements for the Competence of Testing and Calibration Laboratories by one of the following bodies;
- (i) CALA (Canadian Association for Laboratory Accreditation); or
  - (ii) Standards Council of Canada.

**E3. SECTION A (WATER)**

- E3.1 Item 1, Taste and Odour Compound in water shall:
- (a) consist of approximately eighty (80) samples annually;
  - (b) consist of three to six (3-6) water samples submitted with each sampling period, occurring more frequently during “open water season”;
  - (c) have tests performed to include the following parameters:

Item 1	Taste & Odour Compound, Water	
Parameters	Units	MDL
2-isopropyl-3-methoxypyrazine	pg/mL	2
2-isobutyl-3-methoxypyrazine	pg/mL	2
2-methylisoborneol	pg/mL	10
2,4,6-trichloroanisole	pg/mL	2
2,3,6-trichloroanisole	pg/mL	2
Geosmin	pg/mL	1
3,4,5-trichloroveratrole	pg/mL	2

- E3.2 Item 2, Volatile Organic Compounds in water shall:
- (a) consist of approximately forty eight (48) samples annually;
  - (b) consist of three to five (3-6) water samples submitted quarterly;
  - (c) have tests performed to include the following parameters:

Item 2	Volatile Organic Compounds, Water	
Parameters	Units	MDL
Methylene Chloride	ng/L	0.5
MTBE	ng/L	0.05

- E3.3 Item 3, N-Nitrosodimethylamine (NDMA) in water shall:
- (a) consist of approximately twenty (20) samples annually;
  - (b) consist of three to five (3-5) water samples submitted quarterly;
  - (c) have tests performed to include the following parameters:

Item 3	N-Nitrosodimethylamine (NDMA), Water	
Parameters	Units	MDL
NDMA	µg/L	0.001

- E3.4 Item 4, Microcystin LR in water shall:
- (a) consist of approximately forty eight (48) routine and irregular samples annually;
  - (b) occur more frequently during the summer months (April to October);
  - (c) have tests performed to include the following parameter:

Item 4	Microcystin LR, Water	
Parameters	Units	MDL
Microcystin LR	µg/L	0.2

E3.5 Item 5, Total Mercury in water shall:

- (a) consist of approximately fifty six (56) samples annually;
- (b) consist of fourteen (14) water samples submitted quarterly;
- (c) have a minimum of six (6) sample bottles, pre-cleaned and available within eight (8) hours notice;
- (d) have tests performed to include the following parameter:

Item 5	Total Mercury, Water	
Parameters	Units	MDL
Total Mercury	ng/L	0.5

E3.6 Item 6, Manitoba Conservation Test #12 in water shall:

- (a) consist of approximately ten (10) tests annually;
- (b) have tests performed to include the following parameters:

Item 6	Manitoba Conservation Test #12, Water	
Parameters	Units	MDL
<b>Pesticide List 1 (LC/MS-MS)</b>		
Eptam	ug/L	< 0.2
Propachlor	ug/L	< 0.2
Propanil	ug/L	< 0.2
Propoxur	ug/L	< 0.2
<b>Pesticide List 2 (LC/MS-MS)</b>		
Trichlopyr	ug/L	< 0.2
Chlorthalonil	ug/L	< 0.2
<b>Miscellaneous Pesticides</b>		
Alachlor	ug/L	< 0.2
Atrazine	ug/L	< 0.2
Azinphosmethyl	ug/L	< 0.2
Carbofuran	ug/L	< 0.2
Chlorpyrifos	ug/L	< 0.2
Diazinon	ug/L	< 0.2
Diclofop-methyl	ug/L	< 0.2
Dimethoate	ug/L	< 0.2
Malathion	ug/L	< 0.2
Methyl Parathion	ug/L	< 0.2
Metribuzin	ug/L	< 0.2
Parathion	ug/L	< 0.2
Simazine	ug/L	< 0.2
Terbufos	ug/L	< 0.2
Triallate	ug/L	< 0.2
Trifluralin	ug/L	< 0.05
<b>Organochlorine Pesticides</b>		
Aldrin	ug/L	< 0.02
alpha-BHC	ug/L	< 0.02
beta-BHC	ug/L	< 0.02

delta-BHC	ug/L	< 0.02
alpha-Chlordane	ug/L	< 0.02
gamma-Chlordane	ug/L	< 0.02
op-DDD	ug/L	< 0.02
pp-DDD	ug/L	< 0.02
o,p-DDE	ug/L	< 0.02
pp-DDE	ug/L	< 0.02
op-DDT	ug/L	< 0.02
p,p-DDT	ug/L	< 0.02
Dieldrin	ug/L	< 0.02
alpha-Endosulfan	ug/L	< 0.02
beta-Endosulfan	ug/L	< 0.02
Endrin	ug/L	< 0.02
Heptachlor	ug/L	< 0.02
Heptachlor Epoxide	ug/L	< 0.02
Lindane (gamma-BHC )	ug/L	< 0.02
Methoxychlor	ug/L	< 0.02
Mirex	ug/L	< 0.02
<b>Polychlorinated Biphenyls (PCBs)</b>		
Arochlor 1016	ug/L	< 0.1
Arochlor 1221	ug/L	< 0.1
Arochlor 1232	ug/L	< 0.1
Arochlor 1242	ug/L	< 0.1
Arochlor 1248	ug/L	< 0.1
Arochlor 1254	ug/L	< 0.1
Arochlor 1260	ug/L	< 0.1
<b>Pehnoxy Acid Herbicides</b>		
2,4,5-T	ug/L	< 0.05
2,4,5-TP	ug/L	< 0.05
2,4-D	ug/L	< 0.05
2,4-DB	ug/L	< 0.05
2,4-DP	ug/L	< 0.05
Bromoxynil	ug/L	< 0.02
Dicamba	ug/L	< 0.02
Dichloroprop	ug/L	NA
Dinoseb	ug/L	< 0.05
MCPA	ug/L	< 0.05
MCPB	ug/L	< 0.05
MCPP (Mecroprop)	ug/L	< 0.05
Trichlopyr	ug/L	< 0.05

E3.7 Item 7, Sample disposal fee shall:

- (a) consist of unit cost for disposal of samples tested under items 1 to 6.

E3.8 Item 8, Surcharge fee for rush analysis shall:

- (a) consist of the unit cost for rush analysis of any sample(s) tested under items 1 to 6

**E4. SECTION B (WATER/WASTEWATER)**

E4.1 Item 9, Fecal Coliform, wastewater shall:

- (a) consist of up to thirteen hundred and sixty (1360) wastewater samples annually;

- (b) consist of three (3) wastewater effluent samples submitted daily;
- (c) consist of eight to eleven (8 to11) surface water samples submitted biweekly and during “open water season”;
- (d) the high range or “pre-defined endpoint” shall be around one million, reported as “greater than” >1,000,000;
- (e) have tests to include the following parameters:

Item 9	Fecal Coliform, Wastewater	
Parameters	Units	MDL
Fecal Coliform by MPNU to (pre-defined) endpoint	MPNU/100 mL	<3

E4.2 Item 10, Fecal Coliform, ultimate, (to a pre-defined end-point), wastewater shall:

- (a) consist of approximately seventy (70) wastewater samples submitted irregularly, when wastewater flows exceed the wastewater treatment plant’s design capacity;
- (b) be reported as a numerical value;
- (c) have tests to include the following parameters:

Item 10	Fecal Coliform, Wastewater	
Parameters	Units	MDL
Fecal Coliform by MPNU to true endpoint (no maximum value)	MPNU/100 mL	<3

E4.3 Item 11, Escherichia Coliform (E. Coli), wastewater shall:

- (a) consist of up to thirteen hundred and sixty (1360) wastewater samples annually;
- (b) consist of three (3) wastewater effluent samples submitted daily;
- (c) consist of eight to eleven (8 to11) surface water samples submitted biweekly and during “open water season”;
- (d) the high range (maximum reported value) shall be around one million, reported as “greater than” >1,000,000;
- (e) have tests to include the following parameter:

Item 11	Escherichia Coliform, Wastewater	
Parameters	Units	MDL
Escherichia Coliform by MPNU to endpoint	MPNU/100 mL	<3

E4.4 Item 12, Escherichia Coliform (E. Coli), wastewater shall:

- (a) consist of approximately two hundred and twenty (220) samples annually;
- (b) consist of three (3) activated sludge samples submitted weekly and;
- (c) consist of approximately 70 wastewater samples submitted irregularly, when wastewater flows exceed the wastewater treatment plant’s design capacity;
- (d) be reported as a numerical value;
- (e) have tests to include the following parameter:

Item 12	Escherichia Coliform, Wastewater	
Parameters	Units	MDL
Fecal Coliform by MPNU to true endpoint (no maximum value)	MPNU/100 mL	<3

E4.5 Item 13, Total Coliform, wastewater shall:

- (a) consist of approximately fifty (50) wastewater samples submitted irregularly;
- (b) be reported as a numerical value;
- (c) have tests performed to include the following parameter:

Item 13	Total Coliform, Wastewater	
Parameters	Units	MDL
Total Coliform by MPNU to endpoint	MPNU/100 mL	<3

E4.6 Item 14, Total Mercury in dewatered sludge shall:

- (a) consist of thirteen (26) dewatered sludge samples annually;
- (b) consist of one (1) sample submitted biweekly;
- (c) have tests performed to include the following parameters:

Item 14	Total Mercury, Dewatered Sludge	
Parameters	Units	MDL
Total Mercury in Dewatered Sludge	mg/kg dry basis	0.2
Moisture Content	%	0.2

E4.7 Item 15, Total Sulphide in water shall:

- (a) consist of up to ten (10) samples annually;
- (b) have tests performed to include the following parameter:

Item 15	Total Sulphide, Water	
Parameters	Units	MDL
Total Sulphide in water	mg/L	0.005

E4.8 Item 16, Total Reactive Phosphorus in water shall:

- (a) consist of up to twenty (20) samples annually;
- (b) have tests performed to include the following parameter:

Item 16	Total Reactive Phosphorus, Water	
Parameters	Units	MDL
Total Reactive Phosphorus in water	ug/L	1.0

E4.9 Item 17, Total Kjeldahl Nitrogen (low level) in water shall:

- (a) consist of up to twenty (20) samples annually;
- (b) have tests performed to include the following parameter:

Item 17	Total Kjeldahl Nitrogen (low level), Water	
Parameters	Units	MDL
Total Kjeldahl Nitrogen, low level in water	mg/L	0.05

E4.10 Item 18, Sample Disposal fee shall:

- (a) consist of unit cost for disposal of samples tested under items 11 to 16, (items 9 & 10 are taken from the same container as 11 & 12 respectively).

E4.11 Item 19, Surcharge fee for rush analysis shall:

- (a) consist of the unit cost for rush analysis of any sample tested under items 9 to 15.

**E5. SECTION C (SCHEDULE A, WASTEWATER)**

E5.1 Item 20, Total Metals in wastewater shall:

- (a) consist of approximately one (1) sample annually;  
 (b) have tests performed to include the following parameters:

Item 20	Total Metals, Wastewater	
Parameters	Units	MDL
Arsenic	ug/L	0.20
Cadmium	ug/L	0.01
Chromium	ug/L	1.00
Copper	ug/L	0.20
Lead	ug/L	0.09
Mercury	ng/L	1.0
Molybdenum	ug/L	0.20
Nickel	ug/L	2.00
Selenium	ug/L	1.00
Zinc	ug/L	5.00

E5.2 Item 21, Miscellaneous Compounds in wastewater shall:

- (a) consist of approximately one (1) sample annually  
 (b) have tests performed to include the following parameters:

Item 21	Miscellaneous Compounds, Wastewater	
Parameters	Units	MDL
Chromium, Hexavalent	ug/L	1.0
Phenols (4AAP)	ug/L	1.0
Tetraethyllead	ug/L	5.0
Total Oil and Grease	mg/L	1.0
Toxaphene	ug/L	0.10
Tributyl Tin	ng/L	5.0

E5.3 Item 22, Volatile Organic Compounds in wastewater shall:

- (a) consist of approximately one (1) sample annually  
 (b) have tests performed to include the following parameters:

Item 22	Volatile Organic Compounds, Wastewater	
Parameters	Units	MDL
1,1,1,2-Tetrachloroethane	ug/L	0.50
1,1,1-Trichloroethane	ug/L	0.50
1,1,2,2-Tetrachloroethane	ug/L	0.50
1,1,2-Trichloroethane	ug/L	0.50
1,1-Dichloroethane	ug/L	0.50
1,1-Dichloroethylene	ug/L	0.50
1,2-Dibromoethane	ug/L	0.50
1,2-Dichlorobenzene	ug/L	0.50

1,2-Dichloroethane	ug/L	0.50
1,2-Dichloropropane	ug/L	0.50
1,3-Dichlorobenzene	ug/L	0.50
1,4-Dichlorobenzene	ug/L	0.50
2-Hexanone	ug/L	20
Acetone	ug/L	20
Benzene	ug/L	0.50
Bromodichloromethane	ug/L	0.50
Bromoform	ug/L	0.50
Bromomethane	ug/L	1.0
Carbon Disulfide	ug/L	0.50
Carbon tetrachloride	ug/L	0.50
Chlorobenzene	ug/L	0.50
Chloroethane	ug/L	1.0
Chloroform	ug/L	0.50
Chloromethane	ug/L	1.0
cis-1,2-Dichloroethylene	ug/L	0.50
cis-1,3-Dichloropropene	ug/L	0.50
Dibromochloromethane	ug/L	0.50
Dichlorodifluoromethane	ug/L	1.0
Dichloromethane	ug/L	0.50
Ethyl Benzene	ug/L	0.50
m+p-Xylenes	ug/L	1.0
Methyl Ethyl Ketone	ug/L	20
Methyl Isobutyl Ketone	ug/L	20
MTBE	ug/L	0.50
o-Xylene	ug/L	0.50
Styrene	ug/L	0.50
Tetrachloroethylene	ug/L	0.50
Toluene	ug/L	0.50
trans-1,2-Dichloroethylene	ug/L	0.50
trans-1,3-Dichloropropene	ug/L	0.50
Trichloroethylene	ug/L	0.50
Trichlorofluoromethane	ug/L	1.0
Trihalomethanes (total)	ug/L	2.0
Vinyl chloride	ug/L	0.50
Xylenes (Total)	ug/L	1.5

E5.4 Item 23, Target Compounds (by GC/MS), in wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameters:

Item 23	Target Compounds (by GC/MS), Wastewater	
Parameters	Units	MDL
Octachlorostyrene	ug/L	0.50
4,4'-Methylenebis(2-chloroaniline)	ug/L	0.50
Dinitropyrene	mg/L	0.02

E5.5 Item 24, Phenoxyacid Herbicides (by GC/MS), in wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameters:



<b>Item 24</b>	<b>Total Phenoxyacid Herbicides (by GC/MS), Wastewater</b>	
<b>Parameters</b>	<b>Units</b>	<b>MDL</b>
2,4,5-TP	ug/L	0.5
MCPA	ug/L	0.5
Mecoprop	ug/L	0.5
2,4,5-T	ug/L	0.5
2,4-D	ug/L	0.5
Bromoxynil	ug/L	0.5
Dicamba	ug/L	0.5
Dinoseb	ug/L	0.5
Picloram	ug/L	0.5

- E5.6 Item 25, Organochlorine Pesticides in wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameters:

<b>Item 25</b>	<b>Organochlorine Pesticides, Wastewater</b>	
<b>Parameters</b>	<b>Units</b>	<b>MDL</b>
Aldrin	ug/L	1
a-chlordane	ug/L	10
g-chlordane	ug/L	10
alpha-BHC	ug/L	1
beta-BHC	ug/L	1
delta-BHC	ug/L	1
o,p-DDD	ug/L	10
pp-DDD	ug/L	10
o,p-DDE	ug/L	10
pp-DDE	ug/L	10
op-DDT	ug/L	10
pp-DDT	ug/L	10
Dieldrin	ug/L	10
alpha-Endosulfan	ug/L	25
beta-Endosulfan	ug/L	10
Endosulfan Sulfate	ug/L	10
Endrin	ug/L	10
Endrin Aldehyde	ug/L	10
Heptachlor	ug/L	1
Heptachlor Epoxide	ug/L	10
Lindane	ug/L	1
Methoxychlor	ug/L	10
Mirex	ug/L	10
Oxychlordane	ug/L	10

- E5.7 Item 26, Polychlorinated Biphenyls (PCB) in wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameters:

<b>Item 26</b>	<b>Polychlorinated Biphenyls (PCB), Wastewater</b>	
<b>Parameters</b>	<b>Units</b>	<b>MDL</b>

Aroclor 1016	ug/L	0.05
Aroclor 1221	ug/L	0.05
Aroclor 1232	ug/L	0.05
Aroclor 1242	ug/L	0.05
Aroclor 1248	ug/L	0.05
Aroclor 1254	ug/L	0.05
Aroclor 1260	ug/L	0.05
Aroclor 1262	ug/L	0.05
Aroclor 1268	ug/L	0.05
Total PCBs	ug/L	0.10

E5.8 Item 27, PCDD (Dioxins) and PCDF (Furans) in wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameters:

Item 27	PCDD (Dioxins) and PCDF (Furans), Wastewater	
Parameters	Units	MDL
2378 TeCDD	pg/L	0.6
12378 PeCDD	pg/L	0.3
123478 HxCDD	pg/L	0.2
123678 HxCDD	pg/L	0.2
123789 HxCDD	pg/L	0.2
1234678 HpCDD	pg/L	0.3
OCDD	pg/L	0.2
Total TCDD	pg/L	0.6
Total PeCDD	pg/L	0.3
Total HxCDD	pg/L	0.2
Total HpCDD	pg/L	0.3
Total PCDDs	pg/L	0.6
2378 TeCDF	pg/L	0.3
12378 PeCDF	pg/L	0.3
23478 PeCDF	pg/L	0.2
123478 HxCDF	pg/L	0.4
123678 HxCDF	pg/L	0.5
123789 HxCDF	pg/L	0.5
234678 HxCDF	pg/L	0.5
1234678 HpCDF	pg/L	0.2
1234789 HpCDF	pg/L	0.2
OCDF	pg/L	0.3
Total TCDF	pg/L	0.3
Total PeCDF	pg/L	0.3
Total HxCDF	pg/L	0.5
Total HpCDF	pg/L	0.2
Total PCDFs	pg/L	0.5
Total TEQ (ND=0) (WHO Calc)	pg/L	-
Total TEQ (ND=0.5DL) (WHO Calc)	pg/L	-
Total TEQ (ND=DL) (WHO Calc)	pg/L	-

E5.9 Item 28, EPA 8270 Extractables in wastewater shall:

- (a) consist of approximately one (1) sample annually;

(b) have tests performed to include the following parameters:

<b>Item 28</b>	<b>EPA 8270 Extractables, Wastewater</b>	
<b>Parameters</b>	<b>Units</b>	<b>MDL</b>
1-Chloronaphthalene	ug/L	0.4
1-Methylnaphthalene	ug/L	0.4
1,2-Dichlorobenzene	ug/L	0.4
1,2,3-Trichlorobenzene	ug/L	0.4
1,2,4-Trichlorobenzene	ug/L	0.4
1,3-Dichlorobenzene	ug/L	0.4
1,4-Dichlorobenzene	ug/L	0.4
2-Chloronaphthalene	ug/L	0.4
2-Chlorophenol	ug/L	0.3
2-Methylnaphthalene	ug/L	0.4
2-Methylphenol	ug/L	0.5
2-Nitrophenol	ug/L	0.5
2,3,4-Trichlorophenol	ug/L	0.5
2,3,4,5-Tetrachlorophenol	ug/L	0.5
2,3,4,6-Tetrachlorophenol	ug/L	0.5
2,3,5-Trichlorophenol	ug/L	0.5
2,3,5,6-Tetrachlorophenol	ug/L	0.5
2,4-Dichlorophenol	ug/L	0.3
2,4-Dimethylphenol	ug/L	0.5
2,4-Dinitrophenol	ug/L	1
2,4-Dinitrotoluene	ug/L	0.4
2,4,5-Trichlorophenol	ug/L	0.5
2,4,6-Trichlorophenol	ug/L	0.5
2,6-Dichlorophenol	ug/L	0.5
2,6-Dinitrotoluene	ug/L	0.4
3,3'-Dichlorobenzidine	ug/L	0.4
3&4-Methylphenol	ug/L	0.5
4-Bromophenyl phenyl ether	ug/L	0.4
4-Chloro-3-methylphenol	ug/L	0.5
4-Chloroaniline	ug/L	0.4
4-Chlorophenyl phenyl ether	ug/L	0.4
4-Nitrophenol	ug/L	0.5
4,6-Dinitro-2-methylphenol	ug/L	2
5-Nitroacenaphthene	ug/L	0.4
Acenaphthene	ug/L	0.2
Acenaphthylene	ug/L	0.2
Anthracene	ug/L	0.2
Benzo(a)anthracene	ug/L	0.2
Benzo(a)pyrene	ug/L	0.01
Benzo(b)fluoranthene	ug/L	0.2
Benzo(ghi)perylene	ug/L	0.2
Benzo(k)fluoranthene	ug/L	0.2
Biphenyl	ug/L	0.4
Bis(2-chloroethoxy)methane	ug/L	0.4
Bis(2-chloroethyl)ether	ug/L	0.4
Bis(2-chloroisopropyl)ether	ug/L	0.4
Bis(2-ethylhexyl)phthalate	ug/L	2

Butylbenzyl phthalate	ug/L	0.4
Camphene	ug/L	0.4
Chrysene	ug/L	0.2
Cresols (total)	ug/L	1
Di-n-butylphthalate	ug/L	2
Di-n-octylphthalate	ug/L	0.4
Dibenzo(a,h)anthracene	ug/L	0.2
Diethylphthalate	ug/L	0.2
Dimethylphthalate	ug/L	0.2
Diphenyl ether	ug/L	0.4
Diphenylamine	ug/L	0.4
Fluoranthene	ug/L	0.2
Fluorene	ug/L	0.2
Hexachlorobenzene	ug/L	0.04
Hexachlorobutadiene	ug/L	0.2
Hexachlorocyclopentadiene	ug/L	0.4
Hexachloroethane	ug/L	0.4
Indeno(1,2,3-cd)pyrene	ug/L	0.2
Indole	ug/L	0.4
Isophorone	ug/L	0.4
N-Nitroso-di-n-propylamine	ug/L	0.4
Naphthalene	ug/L	0.2
Nitrobenzene	ug/L	0.4
Pentachlorophenol	ug/L	0.5
Perylene	ug/L	0.2
Phenanthrene	ug/L	0.2
Phenol	ug/L	0.5
Pyrene	ug/L	0.2
2-Fluorobiphenyl	%	
2,4,6-Tribromophenol	%	
Nitrobenzene d5	%	
p-Terphenyl d14	%	
Phenol d5	%	

E5.10 Item 29 , Nonylphenols and Nonylphenol Ethoxylates in wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameters:

Item 29	Nonylphenols and Nonylphenol Ethoxylates, Wastewater	
Parameters	Units	MDL
Nonylphenols	µg/L	100
Nonylphenol Monoethoxylates	µg/L	500
Nonylphenol Diethoxylates	µg/L	1200
Nonylphenol Triethoxylates	µg/L	2000
t-Octylphenol	µg/L	2
t-Octylphenol Monoethoxylate	µg/L	10
t-Octylphenol Diethoxylate	µg/L	50
t-Octylphenol Triethoxylate	µg/L	200

E5.11 Item 30, Schedule A Testing Complete (complete set of test to include items 20 to 29) shall:

- (a) consist of approximately twenty four (24) samples annually
- (b) have tests performed to include all parameters listed under items 20 to 29

E5.12 Item 31, Trout Bioassay (Pass/Fail) in wastewater shall:

- (a) consist of a total of three (3) twenty (20) litre wastewater effluent samples submitted quarterly for a total of twelve (12) twenty (20) litre samples submitted annually, along with item 30;
- (b) have tests performed according to the following parameters:

Item 31	Trout Bioassay (Pass/Fail), Wastewater	
Parameters	Units	MDL
Trout Bioassay (Pass/Fail)	%	Pass/Fail

E5.13 Item 32, Trout Bioassay (Pass/Fail) with pH Stabilization in wastewater shall:

- (a) consist of a total of four (4) twenty (20) litre wastewater effluent samples submitted monthly for a total of forty eight (48) twenty (20) litre samples submitted annually, along with item 24;
- (b) have tests performed to include the following parameters:

Item 32	Trout Bioassay (Pass/Fail) with pH Stabilization, Wastewater	
Parameters	Units	MDL
Trout Bioassay (Pass/Fail) with pH Stabilization	%	Pass/Fail

E5.14 Item 33 Sample Disposal fee shall:

- (a) consist of unit cost for disposal of samples tested under items 20 to 32.

E5.15 Item 34, Surcharge fee for rush analysis shall:

- (a) consist of the unit cost for rush analysis of any sample tested under items 20 to 29.

**E6. SECTION D (GIARDIA & CRYPTOSPORIDIUM, WATER/WASTEWATER)**

E6.1 Item 35, Giardia and Cryptosporidium in water shall:

- (a) consist of approximately forty (40) filter samples annually, collected from surface waters;
- (b) have tests performed to include the following parameter:

Item 35	Giardia & Cryptosporidium, Water	
Parameters	Units	MDL
Giardia cyst in water, Non-viable	cyst/100L	1.0
Giardia cyst in water, Viable	cyst/100L	1.0
Cryptosporidium oocyst in water, Non-viable	oocyst/100L	1.0
Cryptosporidium oocyst in water, Viable	oocyst/100L	1.0

E6.2 Item 36, Giardia & Cryptosporidium in wastewater shall:

- (a) consist of approximately twenty (20) wastewater samples annually;
- (b) have tests performed to include the following parameter:

Item 36	Giardia & Cryptosporidium, Wastewater	
Parameters	Units	MDL
Giardia cyst in wastewater, Non-viable	cyst/1L	1.0

Giardia cyst in wastewater, Viable	cyst/1L	1.0
Cryptosporidium oocyst in wastewater, Non-viable	oocyst/1L	1.0
Cryptosporidium oocyst in wastewater, Viable	oocyst/1L	1.0

E6.3 Item 37, Filta-Max Filter Modules shall:

- (a) consists of approximately sixty (60) filters annually;
- (b) filters may packaged and sold in bulk quantities no greater than 10 filter units per pack and;
- (c) each filter must be individually wrapped/sealed.

E6.4 Item 38, Sample disposal fee shall:

- (a) consist of unit cost for disposal of samples tested under items 35 to 36.

E6.5 Item 39, Surcharge fee for rush analysis shall:

- (a) consist of the unit cost for rush analysis of any sample tested under items 35 to 36.

**E7. SECTION E (SCHEDULE B, INDUSTRIAL WASTE)**

E7.1 Item 40, Total Metals in industrial wastewater shall:

- (a) be tested as a whole;
- (b) consist of approximately one (1) sample annually;
- (c) have tests performed to include the following parameters:

Item 40	Total Metals, Industrial Wastewater	
Parameters	Units	MDL
Aluminum	ug/L	1.0
Antimony	ug/L	1.0
Arsenic	ug/L	0.2
Cadmium	ug/L	0.01
Chromium	ug/L	1.0
Cobalt	ug/L	1.0
Copper	ug/L	0.2
Lead	ug/L	0.09
Manganese	ug/L	1.0
Molybdenum	ug/L	0.2
Nickel	ug/L	2.0
Selenium	ug/L	1.0
Silver	ug/L	1.0
Tin	ug/L	1.0
Titanium	ug/L	1.0
Zinc	ug/L	5.0

E7.2 Item 41, Total Mercury in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 41	Total Mercury, Industrial Wastewater	
Parameters	Units	MDL
Total Mercury	mg/L	0.01

- E7.3 Item 42, Chromium, Hexavalent in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 42	Chromium Hexavalent, Industrial Wastewater	
Parameters	Units	MDL
Chromium Hexavalent	ug/L	1.0

- E7.4 Item 43, Total Cyanide in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 43	Total Cyanide, Industrial Wastewater	
Parameters	Units	MDL
Total Cyanide	mg/L	1.0

- E7.5 Item 44, Biochemical Oxygen Demand in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 44	Biochemical Oxygen Demand, Industrial Wastewater	
Parameters	Units	MDL
Biochemical Oxygen Demand	mg/L	2.0

- E7.6 Item 45, Total Suspended Solids in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 45	Total Suspended Solids, Industrial Wastewater	
Parameters	Units	MDL
Total Suspended Solids	mg/L	4.0

- E7.7 Item 46, Fluoride in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 46	Fluoride, Industrial Wastewater	
Parameters	Units	MDL
Fluoride	mg/L	1.0

- E7.8 Item 47, Total Nitrogen in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 47	Total Nitrogen, Industrial Wastewater	
Parameters	Units	MDL
Total Nitrogen	mg/L	1.0

- E7.9 Item 48, Total Phosphorus in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 48	Total Phosphorus, Industrial Wastewater	
Parameters	Units	MDL
Total Phosphorus	mg/L	1.0

- E7.10 Item 49, pH in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 49	pH, Industrial Wastewater	
Parameters	Units	MDL
pH	unit	0.01

- E7.11 Item 50, Total Sulphate in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 50	Total Sulphate, Industrial Wastewater	
Parameters	Units	MDL
Total Sulphate	mg/L	5.0

- E7.12 Item 51, Total Sulphide in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 51	Total Sulphide, Industrial Wastewater	
Parameters	Units	MDL
Total Sulphide	mg/L	1.0

- E7.13 Item 52, Organochlorine Pesticides in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:

Item 52	Organochlorine Pesticides, Industrial Wastewater	
Parameters	Units	MDL
Aldrin/Dieldrin	ug/L	0.05
Chlordane (cis plus trans isomers)	mg/L	0.01
DDT	ug/L	0.02
Hexachlorocyclo-hexane (Lindane)	ug/L	0.02
Mirex	ug/L	0.02

- E7.14 Item 53, Hexachlorobenzene in Industrial Wastewater shall:
- (a) consist of approximately one (1) sample annually;
  - (b) have tests performed to include the following parameter:



Item 53	Hexachlorobenzene, Industrial Wastewater	
Parameters	Units	MDL
Hexachlorobenzene	ug/L	0.04

E7.15 Item 54, Total Polychlorinated Biphenols (PCBs) in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 54	Total Polychlorinated Biphenols (PCBs), Industrial Wastewater	
Parameters	Units	MDL
Total Polychlorinated biphenols (PCBs)	ug/L	0.1

E7.16 Item 55, Volatile Organic Compounds in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 55	Volatile Organic Compounds, Industrial Wastewater	
Parameters	Units	MDL
Benzene	ug/L	0.5
1,1,2,2 Tetrachloroethane	ug/L	0.5
1,2-dichlorobenzene	ug/L	0.5
1,4-dichlorobenzene	ug/L	0.5
Cis-1,2-dichloroethylene	ug/L	0.5
Ethyl benzene	ug/L	0.5
Methylene chloride	ug/L	0.5
Tetrachloro-ethylene	ug/L	0.5
Toluene	ug/L	0.5
Trichloroethylene	ug/L	0.5
Total Xylenes	ug/L	1.5

E7.17 Item 56, 3,3-Dichlorobenzidine in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 56	3,3-Dichlorobenzidine, Industrial Wastewater	
Parameters	Units	MDL
3,3-Dichlorobenzidine	ug/L	0.4

E7.18 Item 57, Pentachlorophenol (PCP) in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 57	Pentachlorophenol (PCP), Industrial Wastewater	
Parameters	Units	MDL
Pentachlorophenol (PCP)	ug/L	0.5

E7.19 Item 58, Total Polycyclic Aromatic Hydrocarbons (PAHs) in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;

(b) have tests performed to include the following parameter:

Item 58	Total Polycyclic Aromatic Hydrocarbons (PAHs), Industrial Wastewater	
Parameters	Units	MDL
Total Polycyclic Aromatic Hydrocarbons (PAHs)	mg/L	0.005

E7.20 Item 59, Nonylphenol and Nonylphenol Ethoxylates in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 59	Nonylphenol and Nonylphenol Ethoxylates, Industrial Wastewater	
Parameters	Units	MDL
Nonylphenol	mg/L	0.02
Nonylphenol Ethoxylates	mg/L	0.2

E7.21 Item 60, Total Phenolics (4AAP) in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 60	Total Phenolics (4AAP), Industrial Wastewater	
Parameters	Units	MDL
Total Phenolics (4AAP)	ug/L	1.0

E7.22 Item 61, Total Oil and Grease in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 61	Total Oil and Grease, Industrial Wastewater	
Parameters	Units	MDL
Animal or Vegetable	mg/L	1.0
Mineral or Synthetic	mg/L	1.0
Total Oil and Grease	mg/L	1.0

E7.23 Item 62, Hydrocarbons in Industrial Wastewater shall:

- (a) consist of approximately one (1) sample annually;
- (b) have tests performed to include the following parameter:

Item 62	Hydrocarbons, Industrial Wastewater	
Parameters	Units	MDL
Total Purgeable Hydrocarbons, C6-C10	mg/L	1.0
Total Extractable Hydrocarbons (TEH), C11-C30+	mg/L	1.0

E7.24 Item 63, Schedule B Testing Complete shall:

- (a) consist of a complete set of tests to include items 40 to 62;
- (b) consist of approximately one hundred (100) sample annually.

E7.25 Item 64, Sample Disposal fee shall:

(a) consist of unit cost for disposal of samples tested under items 40 to 62.

E7.26 Item 65, Surcharge fee for rush analysis shall:

(a) consist of the unit cost for rush analysis of any sample tested under items 40 to 62.

**E8. TURN AROUND TIME**

E8.1 The Turn Around Time or analytical reporting time shall be;

- (a) the time required to report the test results to the Contract Administrator or designate;
- (b) based on the date that the samples were received (at the testing laboratory) and the reporting date.
- (c) fulfilled by submitting an official report or preliminary report in accordance with the specifications outlined under E2.3-E2.6.

E8.2 The Contractor shall not exceed the “extraction time”, “holding time” or “analysis time” written in their own standard operating procedures regardless of the listed turn-around times.

Item	Description	Spec. Ref.	Normal turn around time (days)	Rush turn around time (days)
	<b>SECTION A (Water)</b>	E3		
1	Taste and Odour Compounds in water	E3.1	21	10
2	Volatile Organic Compounds in water	E3.2	21	10
3	NDMA in water	E3.3	21	10
4	Microcystin LR in water	E3.4	21	10
5	Total Mercury in water	E3.5	21	10
6	Manitoba Conservation Test #12 in water	E3.6	21	14
	<b>SECTION B (Water/Wastewater)</b>	E4		
9	Fecal Coliform in wastewater	E4.1	7	NA
10	Fecal Coliform (ultimate) in wastewater	E4.2	7	NA
11	Escherichia Coliform in wastewater	E4.3	7	NA
12	Escherichia Coliform (ultimate) in wastewater	E4.4	7	NA
13	Total Coliform in wastewater	E4.5	7	NA
14	Total Mercury in Dewatered Sludge	E4.6	30	14
15	Total Sulphide in water	E4.7	2	NA
16	Total Reactive Phosphorus in water	E4.8	30	14
17	Total Kjeldahl Nitrogen (low level) in water	E4.9	30	14
	<b>SECTION C (Schedule A, Wastewater)</b>	E5		
20	Total Metals in wastewater	E5.1	30	14
21	Miscellaneous Compounds in wastewater	E5.2	30	14
22	Volatile Organic Compounds in wastewater	E5.3	30	14
23	Target Compounds (by GC/MS) in wastewater	E5.4	30	14
24	Phenoxyacid Herbicides (by GC/MS) in wastewater	E5.5	30	14
25	Organochlorine Pesticides in wastewater	E5.6	30	14
26	Polychlorinated Biphenyls (PCBs) in wastewater	E5.7	30	14
27	PCDD (Dioxins) and PCDF (Furans) in wastewater	E5.8	30	14
28	EPA 8270 Extractables in wastewater	E5.9	30	14
29	Nonylphenols and Nonylphenol Ethoxylates in wastewater	E5.10	30	14
30	Schedule A Testing (Complete set, items 20 to 29)	E5.11	30	14
31	Trout Bioassay-Pass/Fail in wastewater	E5.12	14	NA
32	Trout Bioassay-Pass/Fail with pH Stabilization in wastewater	E5.13	14	NA

	<b>SECTION D (Giardia &amp; Cryptosporidium)</b>	E6		
35	Testing of Giardia & Cryptosporidium in water	E6.1	14	10
36	Testing of Giardia & Cryptosporidium in wastewater	E6.2	14	10
37	Filta-Max Filter Modules (delivery)	E6.3	7	3
	<b>SECTION E (Schedule B, Industrial Waste)</b>	E7		
40	Total Metals	E7.1	30	14
41	Total Mercury in Industrial Wastewater	E7.2	30	14
42	Chromium (hexavalent) in Industrial Wastewater	E7.3	30	14
43	Total Cyanide in Industrial Wastewater	E7.4	30	14
44	Biochemical Oxygen Demand in Industrial Wastewater	E7.5	30	14
45	Total Suspended Solids in Industrial Wastewater	E7.6	30	14
46	Fluoride in Industrial Wastewater	E7.7	30	14
47	Total Nitrogen in Industrial Wastewater	E7.8	30	14
48	Total Phosphorus in Industrial Wastewater	E7.9	30	14
49	pH in Industrial Wastewater	E7.10	30	14
50	Total Sulphate in Industrial Wastewater	E7.11	30	14
51	Total Sulphide in Industrial Wastewater	E7.12	30	14
52	Organochlorine Pesticides in Industrial Wastewater	E7.13	30	14
53	Hexachlorobenzene in Industrial Wastewater	E7.14	30	14
54	Total Polychlorinated Biphenols (PCBs) in Industrial Wastewater	E7.15	30	14
55	Volatile Organic Compounds in Industrial Wastewater	E7.16	30	14
56	3,3-Dichlorobenzidine in Industrial Wastewater	E7.17	30	14
57	Pentachlorophenol (PCP) in Industrial Wastewater	E7.18	30	14
58	Total Polycyclic aromatic hydrocarbons (PAHs) in Industrial Wastewater	E7.19	30	14
59	Nonylphenol and Nonylphenol Ethoxylates in Industrial Wastewater	E7.20	30	14
60	Total Phenolics (4AAP) in Industrial Wastewater	E7.20(a)	30	14
61	Oil and Grease in Industrial Wastewater	E7.22	30	14
62	Hydrocarbons in Industrial Wastewater	E7.23	30	14
63	Schedule B Testing (Complete set, items 40 to 62)	E7.24	30	14