

### FORM A: REQUEST FOR INFORMATION APPLICATION

1. Document Title                      REQUEST FOR INFORMATION FOR BIOSOLIDS LAND APPLICATION

2. Respondent

\_\_\_\_\_  
Name of Respondent

\_\_\_\_\_  
Usual Business Name of Respondent as it appears on Invoice (if different from above)

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

\_\_\_\_\_  
Email Address of Respondent

\_\_\_\_\_  
Facsimile Number

(Mailing address if different)

\_\_\_\_\_  
Street or P.O. Box

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

\_\_\_\_\_  
GST Registration Number (if applicable)

(Choose one)

The Respondent is:

a sole proprietor

a partnership

a corporation

carrying on business under the above name.

3. Contact Person

The Respondent hereby authorizes the following contact person to represent the Respondent for purposes of the Information Submission.

\_\_\_\_\_  
Contact Person

\_\_\_\_\_  
Title

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Facsimile Number

4. Addenda

The Respondent certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Submission:

No.		Dated	
_____		_____	_____
_____		_____	_____
_____		_____	_____

5. Signatures

The Respondent or the Respondent's authorized official or officials have signed this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_ .

Signature of Respondent or  
Respondent's Authorized Official or Officials

\_\_\_\_\_

(Print here name and official capacity of individual whose signature appears above)

\_\_\_\_\_

(Print here name and official capacity of individual whose signature appears above)

## FORM B: REQUEST FOR INFORMATION QUESTIONNAIRE

### Part 1: Project Description

1.1 The objective of the biosolids land application program is to maximize the beneficial reuse of biosolids while minimizing associated risks.

1.2 The scope of work includes:

- a) Comprehensive management and operation of the biosolids land application program
- b) Compliance with all regulatory requirements for the program, including sampling, monitoring, reporting requirements, etc.
- c) Public education and engagement
- d) Consultation with rural municipalities and communities
- e) Marketing of biosolids to agricultural community
- f) Securing land for application
- g) Preparation of Nutrient Management Plans, including determination of application rates
- h) Planning, coordination and implementation of land application schedule
- i) Supply, operate and maintain all equipment for the program
- j) Application of biosolids on agricultural land, spreading and incorporation into soil

1.3 The scope of work may also include:

- a) Design, build, own, operate and maintain a licenced biosolids storage facility
- b) Transportation of biosolids from storage facility to agricultural land

1.4 For estimating purposes, a summary of recent biosolids production is found in Table 1 below:

**Table 1: Monthly Biosolids Production January 2012 – September 2015**

Year	Month	Wet Tonne	Dry Tonne	% Total Solids
2012	January	4,502	1,064	23.7
2012	February	3,739	942	25.0
2012	March	4,563	1,353	29.8
2012	April	3,438	1,038	30.1
2012	May	4,633	1,272	27.4
2012	June	3,831	1,063	27.5
2012	July	4,376	1,005	23.0
2012	August	3,737	935	25.0
2012	September	3,746	889	23.8
2012	October	5,798	1,345	23.3
2012	November	4,403	1,134	25.7
2012	December	4,038	989	24.5
<b>2012</b>		<b>Total: 50,804</b>	<b>Total: 13,029</b>	<b>Average: 25.7</b>

**Table 1 cont'd: Monthly Biosolids Production January 2012 – September 2015**

<b>Year</b>	<b>Month</b>	<b>Wet Tonne</b>	<b>Dry Tonne</b>	<b>% Total Solids</b>
2013	January	4,098	1,030	25.1
2013	February	3,520	928	26.3
2013	March	3,885	1,043	26.3
2013	April	4,826	1,468	30.5
2013	May	5,001	1,601	32.0
2013	June	3,989	1,197	30.0
2013	July	4,692	1,249	26.5
2013	August	3,943	1,002	25.4
2013	September	3,831	891	23.3
2013	October	4,617	1,063	23.1
2013	November	3,478	721	20.7
2013	December	3,400	734	21.5
<b>2013</b>		<b>Total: 49,280</b>	<b>Total: 12,927</b>	<b>Average: 25.9</b>
2014	January	4,438	980	22.2
2014	February	3,418	875	25.6
2014	March	3,891	1,028	28.0
2014	April	4,310	1,369	31.7
2014	May	4,464	1,435	32.3
2014	June	4,895	1,488	30.5
2014	July	4,414	1,444	32.9
2014	August	4,378	1,255	28.7
2014	September	4,321	1,242	28.9
2014	October	3,920	993	25.2
2014	November	2,812	671	23.9
2014	December	3,902	907	23.3
<b>2014</b>		<b>Total : 49,163</b>	<b>Total : 13,687</b>	<b>Average: 27.8</b>
2015	January	3,936	879	22.3
2015	February	3,658	925	25.3
2015	March	4,458	1,247	28.0
2015	April	4,184	1,219	29.1
2015	May	4,311	1,224	28.4
2015	June	4,541	1,337	29.4
2015	July	4,137	1,181	28.6
2015	August	3,321	916	27.6
2015	September	2,010	557	27.7

Note that the portion of biosolids available for land application will be approximately 80% of the monthly total.

## **Part 2: Respondent Information**

### **2.1 Respondent Name**

### **2.2 Respondent Profile**

### **2.3 Relevant Experience**

### **2.4 Projects of Comparable Scope and Magnitude**

**2.5 Subcontractor Name**

**2.6 Subcontractor Role in Project**

**2.7 Subcontractor Profile**

**2.8 Subcontractor Relevant Experience**

**2.9 Subcontractor Projects of Comparable Scope and Magnitude**

### Part 3: Contract Options

The City is investigating two options for the biosolids land application contract. The options are outlined below. Note that any estimate of quantity, time or cost, etc. provided by the Respondent is to help the City develop a contract for biosolids land application. The Respondent will not be held to any estimate provided in their Submission.

Note the following acronyms:

NEWPCC – North End Sewage Treatment Plant

BRRMF – Brady Road Resource Management Facility

#### 3.1 Option A: Land Application – Seasonal Application Program

##### 3.1.1 General Program Description:

Contractor will complete the following:

- a) Comprehensive management and operation of the biosolids land application program
- b) Comply with all regulatory requirements for the program, including sampling, monitoring, reporting, etc.
- c) Public education and engagement
- d) Consult with rural municipalities and communities
- e) Marketing of biosolids to agricultural community
- f) Secure land for application
- g) Prepare Nutrient Management Plans, including application rates
- h) Plan, coordinate and implement land application schedule
- i) Supply, operate and maintain all equipment for the program
- j) Operate biosolids land application program, as generally described below:

Note that biosolids will be transported from NEWPCC to designated site under existing City Contract 355-2015

During the application season outlined in the Manitoba Nutrient Management Regulation, generally between April 11 and November 9, Contractor will manage and operate land application program, including staging and handling of biosolids, biosolids application, spreading and incorporation into soil. Indicate the preferred quantity of biosolids to be applied in section 3.1.9.

During the non-application season, generally between November 10 and April 10, there will be no services required from the Contractor. Biosolids will be transported from NEWPCC to BRRMF under existing City Contract 355-2015.

**3.1.2 Quantity of Biosolids:** Biosolids available for land application will be approximately 80% of monthly biosolids produced during the application season. Table 1 summarizes the monthly biosolids quantity from 2012, 2013, 2014 and part of 2015. For more information, see Biosolids Compliance Reports:  
<http://winnipeg.ca/waterandwaste/sewage/WPCClicenseMonitor.stm#complianceReport>

**3.1.3 Solids Concentration:** See Table 1 for summary of monthly solids concentration from 2012, 2013, 2014 and part of 2015. For more information, see Biosolids Compliance Reports:  
<http://winnipeg.ca/waterandwaste/sewage/WPCClicenseMonitor.stm#complianceReport>

**3.1.4 Quality of Biosolids:** See Biosolids Compliance Reports:  
<http://winnipeg.ca/waterandwaste/sewage/WPCClicenseMonitor.stm#complianceReport>

**3.1.5 Application Rate:** See Manitoba Nutrient Management Regulation:  
[http://web2.gov.mb.ca/laws/reg/current/\\_pdf-reg.php?reg=62/2008](http://web2.gov.mb.ca/laws/reg/current/_pdf-reg.php?reg=62/2008)

**3.1.6 Term of Contract:** 3 year contract + 1 year renewal option + 1 year renewal option

**3.1.7 Basis of Payment:** Cost / Wet Tonne for biosolids applied

**3.1.8 Indicate the level of interest in Option A:**

**3.1.9 Indicate the preferred quantity of biosolids to be applied per season for Option A:**

**3.1.10 Indicate the approximate amount of biosolids to be applied during the following time periods:**

**a) Spring (before crop planting):**

**b) Summer (during crop growing season)**

**c) Fall (after crop harvesting)**



**3.1.11 Provide an approximate range of costs for Option A:**

Approximate Cost / Wet Tonne for biosolids applied: \_\_\_\_\_

Based on approximately \_\_\_\_\_ wet tonnes of biosolids applied per season

**3.1.12 Biosolids will be delivered from NEWPCC to designated site under City Contract 355-2015. After delivery, the staging and handling of the biosolids will be the responsibility of the Contractor. Describe a staging and handling system that might be used for Option A:**

**3.1.13 Suggest how to manage the risk of wet weather during the application season, when field conditions are unsuitable for biosolids application:**

**3.1.14 Suggest modifications to Option A:**

**3.1.15 Indicate the amount of lead time required prior to starting land application program described in Option A:**

### 3.2 Option B: Land Application – Seasonal Application Program plus Winter Storage Facility

#### 3.2.1 General Program Description

Contractor will complete all of the tasks outlined in 3.1.1 (a) to (i), plus the additional tasks outlined below:

- j) Provide a licenced biosolids storage facility. Contractor may use suitable existing facility, or construct new facility. Contractor will own, operate, and maintain storage facility.
- k) Transport biosolids from storage facility to agricultural land, in accordance with all applicable regulations
- l) Operate biosolids land application program, as generally described below:

Note that biosolids will be transported from NEWPCC to storage facility under existing City Contract 355-2015.

During the application season outlined in the Manitoba Nutrient Management Regulation, generally between April 11 and November 9, Contractor will manage and operate land application program, including operation of biosolids storage facility, transportation of biosolids from storage facility to agricultural land, biosolids application, spreading and incorporation into soil.

During non-application season, generally between November 10 and April 10, Contractor will operate biosolids storage facility.

Indicate the preferred quantity of biosolids to be applied and stored in section 3.2.10.

**3.2.2 Quantity of Biosolids\*:** Biosolids available for land application will be approximately 80% of monthly biosolids produced for the year. Table 1 summarizes the monthly biosolids quantity from 2012, 2013, 2014 and part of 2015. For more information, see Biosolids Compliance Reports:

<http://winnipeg.ca/waterandwaste/sewage/WPCClicenseMonitor.stm#complianceReport>

**3.2.3 Solids Concentration\*:** See Table 1 for summary of monthly solids concentration from 2012, 2013, 2014 and part of 2015. For more information, see Biosolids Compliance Reports:

<http://winnipeg.ca/waterandwaste/sewage/WPCClicenseMonitor.stm#complianceReport>

**3.2.4 Quality of Biosolids\*:** See Biosolids Compliance Reports:

<http://winnipeg.ca/waterandwaste/sewage/WPCClicenseMonitor.stm#complianceReport>

**3.2.5 Application Rate:** See Manitoba Nutrient Management Regulation:

[http://web2.gov.mb.ca/laws/regqs/current/\\_pdf-regqs.php?reg=62/2008](http://web2.gov.mb.ca/laws/regqs/current/_pdf-regqs.php?reg=62/2008)

**3.2.6 Term of Contract:** 5 year contract + 2 year renewal option + 2 year renewal option.

**3.2.7 Basis of Payment:** Cost / Wet Tonne for biosolids applied and Cost / Wet Tonne for biosolids stored

**3.2.8 \*Note:** As part of the SEWPCC and NEWPCC Upgrade projects, the secondary treatment processes will be upgraded to biological nutrient removal (BNR). As part of the NEWPCC Upgrade, the sludge treatment process will be upgraded to include thermal hydrolysis, anaerobic digestion, dewatering and phosphorus recovery in the form of struvite. The upgrades mean that the biosolids quality, quantity and solids concentration may change over the course of the contract. The upgraded biosolids processes have not been designed and specific information on biosolids quality, quantity and solids concentration after the upgrades is not available at this time.

**3.2.9 Indicate the level of interest in Option B:**

**3.2.10 a) Indicate the preferred quantity of biosolids to be applied per season:**

**b) Indicate the preferred quantity of biosolids to be stored per year:**

**c) Indicate the estimated capacity and footprint of the storage facility:**

**3.2.11 Indicate the approximate amount of biosolids to be applied and stored during the following time periods for Option B:**

**a) Spring (before crop planting)**

**Applied:**

**Stored:**

**b) Summer (during crop growing season)**

**Applied:**

**Stored:**

**c) Fall (after crop harvesting)**

**Applied:**

**Stored:**

**d) Winter (non-application season)**

**Applied: 0 Tonnes**

**Stored:**

**3.2.12 Provide an approximate range of costs for Option B:**

a) Approximate Cost / Wet Tonne for biosolids applied: \_\_\_\_\_

Based on approximately \_\_\_\_\_ wet tonnes of biosolids applied per season

b) Approximate Cost / Wet Tonne for biosolids stored: \_\_\_\_\_

Based on approximately \_\_\_\_\_ wet tonnes of biosolids stored per year

**3.2.13 The biosolids may be considered Class B with respect to pathogens according to the United States Environmental Protection Agency guidelines, until the new sludge processing facilities are constructed.**

**a) Describe the risks of storing Class B biosolids:**

**b) Describe the Respondent's experience in storing Class B biosolids:**

**3.2.14 Suggest modifications to Option B:**

**3.2.15 Indicate the amount of lead time required prior to starting land application program described in Option B:**

### 3.3 Preferred Option

**3.3.1 Indicate the preferred Option for biosolids land application:**

### 3.4 Alternative Options

**3.4.1 If desired, propose an Alternative Option for biosolids land application:**

### 3.5 Other Information

**3.5.1 Provide any other information or comments which may be useful to the City regarding the biosolids land application program:**





<b>4.3 Responsibilities – Option B</b>	<b>Contractor</b>	<b>City of Winnipeg</b>
Biosolids treatment and processing at NEWPCC		<b>X</b>
Biosolids transport to storage facility		<b>X</b>
Management and operation of land application program	<b>X</b>	
Design, build, own, operate, maintain storage facility	<b>X</b>	
Environment Act Licence for storage facility	<b>X</b>	
Environment Act Licence for operation of the program**	<b>X</b>	<b>X</b>
Biosolids transport from storage facility to agricultural land	<b>X</b>	
Compliance with all regulatory requirements – sampling, monitoring, reporting, etc.**	<b>X</b>	
Public education and engagement	<b>X</b>	
Consult with rural municipalities and communities	<b>X</b>	
Marketing to agricultural community	<b>X</b>	
Secure land for application	<b>X</b>	
Prepare Nutrient Management Plans	<b>X</b>	
Determine application rates	<b>X</b>	
Plan and coordinate land application schedule	<b>X</b>	
Supply, operate and maintain all equipment for program	<b>X</b>	
Manitoba Conservation and Water Stewardship Reports**	<b>X</b>	

**\*\*Note** Regarding the Environment Act Licence for operation of the program, it is the City's intention to enter into an agreement with the Contractor to transfer the responsibility of specific clauses to the Contractor.

**4.4 Provide input on the Risk Matrix for Option B: Seasonal Application Program plus Winter Storage Facility:**