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### 7. EXISTING FACILITIES O&M REQUIREMENTS

#### 7.1 GENERAL

This Section specifies the requirements for the Existing Facilities O&M.

In this Section "Contractor Existing Facilities O&M Representative" means the person appointed by the Contractor to be responsible for all communications with the Province regarding the Existing Facilities O&M.

In this Section "**Provincial Existing Facilities O&M Representative**" means the person(s) appointed by the Province to be its representative in connection with the oversight of the Existing Facilities O&M and the person(s) responsible for all communications with the Contractor Existing Facilities O&M Representative.

Notwithstanding the specific requirements of this Section 7, the Contractor shall ensure that the Existing Facilities are operated and maintained in a manner that ensures the continuous and uninterrupted delivery of the service to the Existing Facilities End-users, and specifically that:

- (a) the Existing Facilities are operated at all times in full compliance with the Existing Facilities Licenses; and
- (b) the Existing Facilities are operated at all times in accordance with Good Industry Practice.

#### 7.2 EXISTING FACILITIES O&M REPRESENTATIVES

The Contractor shall appoint a Contractor Existing Facilities O&M Representative and shall notify the Province of such appointment not less than 10 Business Days before the Transition Target Date.

The Province shall appoint one or more person(s) to serve the Provincial Existing Facilities O&M Representative, and shall notify the Contractor of such appointments within 10 Business Days of receipt of the Contractor's notice of appointment of the Contractor Existing Facilities O&M Representative.

The Contractor Existing Facilities O&M Representative and the Provincial Existing Facilities O&M Representative(s) may appoint alternates to serve in addition to, or temporarily in their place, or may delegate some of the functions of their respective representatives.

The Contractor shall not rely upon any acts, omissions, requirements or directions of the Provincial Existing Facilities O&M Representative(s) or any other person whatsoever as authority for any departure from the terms of the DBFO Agreement.

#### 7.3 PROVINCE'S RESPONSIBILITIES

The Existing Facilities will be provided to the Contractor on the Transition Target Date on an "as is" basis. The Province provides no representation or warranties with respect to the Existing Facilities.

#### 7.4 CONTRACTOR'S RESPONSIBILITIES

The Contractor is responsible for every aspect of the Existing Facilities O&M including all labour, materials and equipment required in operating and maintaining the Existing Facilities, and including:

- (a) administration services, computer hardware components and software based applications, on-line data entering, internet connection, accounting, clerical, legal and technical personnel;
- (b) maintaining and updating the Emergency Response Plans and coordinating site evacuation procedure and drills;
- (c) all inspections and reports required by the DBFO Agreement and any Governmental Authority;
- (d) maintaining an energy management program;
- (e) supplying required equipment;
- (f) fire systems (including fire extinguishers, fire hoses, sprinkler systems, fire alarms, fire pumps, emergency lights) maintenance, testing and inspection;
- (g) completing annual testing and inspection of back-flow preventers and pressure regulators;
- (h) completing monthly and annual load testing and inspection of the emergency generator;
- (i) completing annual registration for boilers and pressure vessels;
- (j) completing annual inspection and testing of fire hydrants;
- (k) completing annual inspection and cleaning and flushing of collection and distribution system manholes;
- (l) completing annual inspection and exercising of distribution system and collection system valves:
- (m) completing the annual inspection, maintenance and testing of system pumps;
- (n) completing the annual inspection, maintenance and testing of cathodic protection system;
- (o) completing the monthly inspection and testing of storage reservoirs and associated alarm systems;
- (p) monitoring system flow and pressure requirements to ensure it meets design and operations requirements;
- (q) taking monthly meter reading and reporting on all metered systems;

- (r) responding to water or wastewater related emergencies i.e. main breaks;
- (s) repairing and replacement of broken or leaking water mains;
- (t) repairing and replacement of infrastructure as a result of inspections;
- (u) garbage removal and bin rental including recyclable products;
- (v) paying any management fees;
- (w) operating, monitoring and maintenance of 24-hour monitoring systems;
- (x) operating and maintaining all applicable heating, cooling and humidity systems;
- (y) operating and maintaining the building management and control system;
- (z) repair or replacement of equipment;
- (aa) performing preventative and routine maintenance;
- (bb) performing property security;
- (cc) handling Existing Facilities End-users complaints and requests;
- (dd) keeping the buildings and other operations clean, tidy and safe;
- (ee) supplying all shop supplies i.e. oil, grease, rags, tape, hardware;
- (ff) ensuring all fencing is secure and maintained;
- (gg) sampling and laboratory testing requirements for license requirements and operational purposes;
- (hh) supplying all chemicals required for treatment and laboratory testing, etc.;
- (ii) providing monthly and annual operation reports; and
- (jj) ensuring all approval and permits applicable for the Existing Facilities are maintained in good standing with any Governmental Authority during the Construction Period.

### 7.5 OPERATIONAL AND MAINTENANCE OBJECTIVES

The Contractor shall provide the Existing Facilities O&M described herein in a professional and diligent manner during the Construction Period.

The Existing Facilities O&M shall be performed in a manner and approach that that is consistent with achieving the following Existing Facilities O&M objectives:

- Protecting the health and welfare of the public and the environment;
- Conforming with the Occupational Health and Safety Act and regulations;
- Complying with all regulatory approval, license and permit requirements;
- Ensuring at all times that there is continuous and reliable service delivered to the
  Existing Facilities End-users who are supplied with treated water by the Evan-Thomas
  water treatment plant and the potable water distribution system, or whose sanitary
  sewer systems are connected to the Evan-Thomas wastewater collection network;

- Maintaining the availability and readiness of the existing service reservoirs for fire-fighting; and
- Performing all related functions with due regard to the intended use of the Existing Facilities and in keeping with Good Industry Practice.

The Contractor shall conduct predictive, preventive, and routine equipment maintenance of the Existing Facilities described herein in order to achieve the following overall objectives:

- Ensure the performance of the Existing Facilities is consistent with the expected operating conditions to meet the requirements of Alberta Environment and any other Governmental Authority;
- Perform predictive and preventive maintenance on all equipment in accordance with recommendations of the equipment manufacturer(s);
- Perform preventative maintenance in such a manner that the condition and functionality of the Existing Facilities are maintained in good operating condition; and
- Ensure that fully trained and appropriately licensed operators and qualified support staff are assigned to the Existing Facilities O&M at all times.

### 7.6 REGULATORY APPROVALS FOR EXISTING FACILITIES O&M

The Contractor will be responsible for ensuring that the Existing Facilities Licenses remain valid and in good standing, and that all of the license requirements are adhered to throughout the Construction Period.

### 7.7 EXISTING FACILITIES O&M PLANS

The requirements of the Existing Facilities O&M Plan are outlined in Section 3.9. The Contractor shall review the Existing Facilities O&M Plans regularly during the Construction Period, and submit any amendments and updates as required, in accordance with Schedule 5 (Design and Plan Certification Process and Review).

### 7.7.1 Plans, Specification, and Operation and Maintenance Manuals

Existing plans, operation and maintenance manuals, asset management records and operating procedures for the Existing Facilities O&M will be provided by the Province to the Contractor to the extent that they are available. The Province does not warrant the completeness or accuracy of these existing plans, operation and maintenance manuals, asset management records and operating procedures.

The existing plans, operation and maintenance manuals, asset management records and operating procedures are to be maintained during the Construction Period and remain on the Existing Facilities.

Changes to the Existing Facilities made during the Construction Period shall be duly recorded by the Contractor and updated within the plans, operation and maintenance manuals, asset

management records and operating procedures.

#### 7.8 EXISTING FACILITIES O&M TRANSITION

The Province will arrange for personnel knowledgeable with operation and maintenance of the Existing Facilities to be available for a transition period of up to eight weeks, at the Execution of the DBFO Agreement, to liaise with the Contractor in the takeover of the management of the Existing Facilities.

The Contractor shall arrange for all personnel that will be involved in the Existing Facilities O&M to be on-site during the transition period to become fully familiar with and obtain relevant information on the Existing Facilities.

### 7.9 EXISTING FACILITIES O&M REQUIREMENTS

This Section summarizes the Existing Facilities O&M requirements.

### 7.9.1 Existing Facilities O&M Measurement and Testing Requirements

#### 7.9.1.1 General

This Section sets out the minimum requirements for the Existing Facilities performance, measurement, sampling, testing and analysis applicable to the Existing Facilities from the date that the Contractor takes over the Existing Facilities O&M until Availability.

The Contractor shall carry out, at its own expense, all measurement and testing required under the DBFO Agreement and to comply with the requirements of the Existing Facilities Licenses.

It is the Contractor's responsibility to demonstrate to the Province and the regulators having jurisdiction over the Existing Facilities Licenses that they are meeting the requirements of the DBFO Agreement and the Existing Facilities Licenses.

For any monitoring required pursuant to the Existing Facilities Licenses, the Contractor shall collect, preserve, store, handle, and analyze all samples in accordance with the *Standard Methods for the Examination of Water and Wastewater*, published by the American Public Health Association, the American Waterworks Association and the Water Environment Federation, (as amended or replaced from time to time).

The analytical laboratory used for the regulatory reporting requirements must be certified for all analyses performed in accordance with the regulatory requirements of any Governmental Authority. The Contractor may perform these services itself or elect to use a contracted, certified laboratory to perform any or all of the analytical testing.

All laboratory operations shall be set up, audited, and monitored to ensure compliance with the requirements of any Governmental Authority.

### 7.9.1.2 Evan-Thomas Waterworks System Requirements

The Contractor shall operate and maintain the Evan-Thomas waterworks system in compliance with Alberta Environment Approval 1517-02, including the performance, measurement, sampling, testing and analysis requirements therein. The Contractor is responsible for identifying and complying with all the terms and conditions of such approval.

## 7.9.1.3 Evan-Thomas Raw Water Wells Requirements

The Contractor shall operate and maintain the Evan-Thomas raw water wells in compliance with Alberta Environment License to divert and use water #11148, including the performance, measurement, sampling, testing and analysis requirements therein. The Contractor is responsible for identifying and complying with all the terms and conditions of such approval.

### **7.9.1.4** Evan-Thomas Wastewater System Requirements

The Contractor shall operate and maintain the Evan-Thomas wastewater system in compliance with Alberta Environment Approval 1518-02, including the performance, measurement, sampling, testing and analysis requirements therein. The Contractor is responsible for identifying and complying with all the terms and conditions of such approval.

### 7.9.1.5 Barrier Lake Lagoons and Sludge Drying Beds Requirements

The Contractor shall operate and maintain the Barrier Lake Lagoons and Sludge Drying Beds in compliance with EPEA Registration No. 395-03, including the performance, measurement, sampling, testing and analysis requirements applicable and as set out in the Code of Practice for Wastewater Systems Using a Wastewater Lagoon. The Contractor is responsible for identifying and complying with all the terms and conditions of such registration.

In addition to the residuals produced from Evan-Thomas wastewater system, the Contractor must receive and treat at the Barrier Lake Lagoon and Sludge Drying Beds the aerobically digested solids from the William Watson Lodge wastewater treatment facility.

### 7.9.2 Residuals Management and Disposal

The residuals management procedures in force prior to the Execution of the DBFO Agreement shall be maintained as part of the Existing Facilities O&M from the date that the Contractor takes over the Existing Facilities O&M until Availability.

The Contractor shall be responsible for the full management, including but not limited to processing, handling, storage, transport, and disposal of all residuals generated by the Existing Facilities.

The collection, transportation, disposal and/or utilization of all residuals shall be in compliance with all applicable laws of any Governmental Authority having jurisdiction over these activities.

The Contractor shall provide all sampling, analysis, record-keeping, and reporting for all residuals management and disposal activities in compliance with the Existing Facilities Licences and the requirements of any Governmental Authority.

The Contractor is responsible for the ultimate disposal of all sludge and the dewatered residuals from the existing Evan-Thomas wastewater treatment plant and the Barrier Lake Lagoons and Sludge Drying Beds to an accredited landfill. This requirement applies to the aerobically digested sludge from the William Watson Lodge wastewater treatment facility

### **7.9.3** Flow and Quality Measurement Instruments

The Contractor shall maintain the flow meters, level monitors and water and wastewater quality analyzers that form part of the Existing Facilities from the date that the Contractor takes over the Existing Facilities O&M until Availability.

The Contractor shall inspect, calibrate and test each flow meter, level monitor and water and wastewater quality analyzer:

- In accordance with the manufacturer's instructions;
- In accordance with the requirements of the Existing Facilities Licenses; and
- As set out in the Existing Facilities O&M Plan.

The inspection, calibration and testing shall be capable of determining whether each flow meter, level monitor and water and wastewater quality analyzer is providing flow, level and quality information within the manufacturers specified accuracy for the instrument.

#### 7.9.4 Noise Control Procedures

The Contractor shall be responsible for managing noise from the Existing Facilities from the date that the Contractor takes over the Existing Facilities O&M until Availability. All noise control measures and procedures in force prior to the Execution of the Agreement shall be maintained in the most judicious manner to ensure continuance of the level of service. The Contractor shall minimize noise impacts and use appropriate noise attenuation, noise barriers, and other techniques for reducing noise to meet the permissible sound levels established by the Local Authority and any Governmental Authority.

The Contractor shall maintain a full record of all incidents and implemented measures, processes, and procedures relating to noise which occur during the Construction Period. The Contractor shall make these records available for inspection by the Province upon reasonable notice.

#### 7.9.5 Odour Management Plan and Response

The Contractor shall be responsible for managing odour from the Existing Facilities from the

date that the Contractor takes over the Existing Facilities O&M until Availability.

All odour control measures and procedures in force prior to the Execution of the Agreement shall be maintained in the most judicious manner to ensure continuance of the level of service.

The Contractor shall minimize the emission of odorous compounds generated from the Evan-Thomas wastewater treatment works and shall minimize nuisance odour and odour impacts.

The Contractor shall maintain a full record of all incidents and implemented measures, processes, and procedures relating to odour which occur during the Construction Period. The Contractor shall make these records available for inspection by the Province upon reasonable notice.

### 7.9.6 Security

The Contractor shall be responsible for the security of the Existing Facilities from the date that the Contractor takes over the Existing Facilities O&M until Availability.

All security measures and procedures in force prior to the Execution of the Agreement shall be maintained in the most judicious manner to ensure continuance of the level of service.

The Contractor shall be responsible for ensuring that security is in compliance with all applicable laws with respect to guarding against terrorist and security threats.

The Contractor shall maintain a full record of all incidents and implemented measures, processes, and procedures relating to security which occur during the Construction Period. The Contractor shall make these records available for inspection by the Province upon reasonable notice.

### 7.9.7 Monthly Operation and Maintenance Report

The Contractor shall be responsible for preparing monthly operation and maintenance reports for the Existing Facilities O&M in accordance with the procedure set out in the Existing Facilities O&M Plan.

The Contractor shall prepare the monthly reports in compliance with the monthly reporting requirements of the Existing Facilities Licenses. Each monthly operation and maintenance report, shall as a minimum, include the following:

- Provide the Province with information reasonably required to assess the adequacy of the delivery of the services;
- Be structured to cover the Existing Facilities O&M as a whole and the work at each facility;
- Description of any periods of reduced service capacity of the Evan-Thomas potable water treatment plant or the Evan-Thomas wastewater treatment plant, including an

explanation of the cause of any reduction in capacity, and a description of the events and actions taken to restore capacity;

- Description of any Treated Water quality sample failures, including copies of the contemporary water quality records from the plant SCADA Systems and operating records, an explanation of the cause, details of the date, time, and duration, and an explanation, if applicable, of how the quality failure was rectified;
- Description of any Treated Wastewater quality sample failures, including copies of the contemporary water quality records from the plant SCADA Systems and operating records, an explanation of the cause, details of the date, time, and duration, and an explanation, if applicable, of how the quality failure was rectified;
- Significant maintenance and renewal activities in the period, including details of any routine or unscheduled maintenance outages;
- Description of any material changes to any of the Existing Facilities O&M Plan or the Existing Facilities Occupational Health and Safety Plan;
- Staffing and resources, including any changes in personnel;
- Health and safety (including accident records);
- Environmental or public relations issues;
- Set out the monthly energy consumption and the cumulative total energy consumption for the Existing Facilities; and
- Any other relevant issues.

The Contractor shall prepare and submit to the Province the proposed format and contents for the monthly operation and maintenance reports and secure the Province's written acceptance prior to the submission of the first month operation and maintenance report.

### 7.9.8 Annual Operation and Maintenance Reporting

The Contractor shall be responsible for preparing annual operation and maintenance reports for the Existing Facilities O&M in accordance with the procedure set out in the Existing Facilities O&M Plan.

The Contractor shall prepare the annual reports in compliance with the annual reporting requirements of the Existing Facilities Licenses.

### 7.9.9 Operation and Maintenance Inspections and Meetings

The Contractor shall maintain all records of operating data and information relevant to the Existing Facilities O&M, including accounting and financial records. The Contractor shall provide the Province access to all such records upon request.

The Contractor shall hold a monthly meeting with the Province to discuss the Existing Facilities O&M reports and other issues related to the Existing Facilities O&M.

#### **7.9.10 Call Centre**

#### 7.9.10.1 Call Centre Requirements

The Contractor shall implement a call centre system with a database for recording all incidents and events relating to the performance of the Existing Facilities O&M to the Province and the Existing Facilities End-users.

The Contractor shall ensure that the call centre database is the central repository for all customer contacts and for information concerning the Existing Facilities O&M as it affects the Province and the Existing Facilities End-users.

The Contractor shall develop a call centre plan (refer to Section 3.9.2) as part of the Existing Facilities O&M Plan.

The Contractor shall ensure the call centre operates 24 hours per day each calendar day of the year and shall make provisions for backup call centre services.

The Contractor shall ensure the call centre provides the day-to-day notification interface between the Province, the Existing Facilities End-users and the Contractor and any of its subcontractors in relation to the following matters:

- All inquiries and repair requests;
- The notification of any service interruptions including quantity or quality failures;
- Notification of Major Incidents to the Province;
- Complaints or compliments;
- Monitoring of security events;
- Notification of accidents or emergencies requiring the assistance of the Contractor;
- Requests for information relating to the operation of the call centre; and
- Communications and status updates between the Contractor and the Existing Facilities End-users to inform progress and status for the rectification of any service interruptions or any other service issue pertaining to the function and performance of the Existing Facilities.

The Contractor shall ensure the call centre maintains a daily electronic log of all call centre contacts, notifications and requests, including calls reporting service failures and Major Incidents.

The Contractor shall ensure the call centre records into the electronic log all relevant details, including, but not limited to, the following information:

• Call centre operator's name;

- Requester's name;
- Date and time;
- Repair or correction required;
- Full incident description;
- Request response time;
- Unique request reference identifier;
- Subcontractor and contact name to which the request was passed if applicable;
- Date and time request was passed to the relevant subcontractor;
- Action taken and by whom; and
- Rectification time for any service failure.

Service failures and Major Incidents may be reported to the call centre by the Province if the Province becomes aware of the service failure or Major Incident.

Service failures and Major Incidents that are identified by the Contractor or its subcontractors through routine operation and maintenance activities, monitoring, inspection or testing shall also be reported promptly to the call centre.

The Contractor shall ensure the call centre is the central repository and database for all information concerning the Existing Facilities End-users' interface with the Existing Facilities, and for all service failures and Major Incidents howsoever they may be identified.

The Contractor shall not delete or alter any details recorded by the call centre unless approved in writing in advance by Province and the following information is recorded:

- The exact nature and impact of the alteration or deletion;
- The reason for the alteration or deletion; and
- The name of the person who authorized the alteration or deletion.

The Contractor shall ensure that the call centre has emergency incident support procedures in place for raising alarms, reporting events to internal and external authorities and logging details of emergencies.

#### 7.9.11 Regulatory Compliance Requirements

The Contractor will be responsible for ensuring that the Existing Facilities Licenses remain valid and in good standing, and that all of the license requirements are adhered to throughout the Construction Period.

If the Contractor violates or contravenes any of the requirements of the Existing Facilities

Licenses, the Contractor shall be subject to a Payment Adjustment in the amount set forth in Table 7.9.11 below.

Table 7.9.11 Regulatory Non-Compliance Payment Adjustments				
Non-compliance event	Monitoring Period	Payment Adjustments for Non-compliance <sup>a</sup>		
Violation of any term or condition of a regulatory approval or permit.	The first non-compliance event in a 365 day period	\$1,000		
	The second non-compliance event of the same infringement in a 365 day period	\$2,500		
	The third non-compliance event of the same infringement in a 365 day period	\$5,000		
	The fourth and each subsequent non-compliance events of the same infringement in a 365 period	\$10,000		
Violations Requiring Public Notification <sup>b</sup>	Per event	\$25,000		

- a. The Payment Adjustments stated above do not include any fines or penalties that may be assessed by any Governmental Authority.
- b. Public notification refers to violations for which the Contractor is required by applicable law or ordered by any Governmental Authority to issue a public notification; e.g. Boil Water Advisories.

#### 7.10 ASSET MANAGEMENT

#### **7.10.1** Preamble

The Contractor is responsible for the asset management of the Existing Facilities from the Transition Target Date up until Availability.

### 7.10.2 Objectives

The main objectives of the Contractor's asset management activities for the Existing Facilities O&M shall be as follows:

- Measure and monitor the condition and performance of the assets comprising the Existing Facilities; and
- Ensure that the assets are managed, operated, maintained, renewed and replaced such that they are fit for their intended purpose and that they are capable of meeting the

requirements of the Existing Facilities Licences and delivering uninterrupted service to the Existing Facilities End-users up until Availability.

In planning and carrying out the asset management of the Existing Facilities, the Contractor shall make allowance for a significant delay in Availability due to any cause (foreseeable, Force Majeure Event or otherwise), and shall ensure that the existing assets have sufficient asset life, and that there is a sufficient stock of spare parts available to continue to operate the Existing Facilities for at least one year longer than the latest foreseeable Availability Target Date.

#### 7.10.3 Asset Records

The Contractor is responsible for maintaining asset management records for the Existing Facilities, including:

- Records of all routine and reactive maintenance activity; and
- Any asset condition or performance data recorded by the Contractor.

### 7.10.4 Asset Maintenance

The Contractor shall develop and perform routine, preventive, and predictive maintenance procedures based on Good Industry Practice and manufacturers' recommendations for the mechanical, electrical, instrumentation/control equipment, water and wastewater process units, buildings and housekeeping activities, distribution system assets, collection system assets, and landscaping activities.

The Contractor shall maintain computerized and manual records related to all service and repair work performed.

The Contractor shall ensure that all preventative maintenance activities, frequencies and requirements for the Existing Facilities are adhered to from the date of transition up until Availability.

### 7.10.5 Materials and Workmanship

The Contractor shall ensure that all materials, and all repairs, replacements and renewals carried out by the Contractor as part of its Existing Facilities O&M obligations under this Section 7 shall, unless otherwise specified herein, be of the same quality as the those incorporated into the Existing Facilities, taking into account advancements in materials development and Good Industry Practice at the time of replacement or renewal.

Where parts, systems or components need to be replaced, they shall be replaced with new parts, systems or components.

No used or reconditioned parts, systems or components shall be used without the prior written consent of the Department.