Application Form and Guide for a New or Renewed Approval of a Municipal Mechanical Wastewater System

Introduction

The attached form and guidelines outline the information required for an application for an approval or approval renewal of a mechanical wastewater system. The application has been prepared in accordance with the Environmental Protection and Enhancement Act (EPEA) and Approval and Registrations Procedure Regulation 113/93. Please ensure that each section of the application is completed in a concise and clear manner.

A wastewater system includes wastewater collection mains, lift stations, wastewater treatment plant, treated effluent storage, treated effluent wetlands, pumping, any treated effluent outfall(s), the treated effluent discharge route, and if applicable, wastewater irrigation systems and lands used for irrigation.

For your information, the general steps and procedures that are followed when reviewing and issuing an Approval for a municipal wastewater system is illustrated by the attached flow chart (Figure 1). Of particular note is the fact that the application for this Approval must be advertised by the applicant and that the applicant, upon request, must provide copies of the application to the public. It is therefore important that the application for this Approval contain all the information required and be formatted to facilitate public review.

Application for new approvals must contain written confirmation, by a professional registered with APEGGA that all aspects of the wastewater design conform to the requirements of the Regulations under the Act, or a statement identifying and justifying any deviation. The plans and specifications submitted in support of the new approval must also be signed and stamped by a professional registered with APEGGA.

All information spaces in this application must be filled in or marked not applicable (N/A). Failure to provide all necessary information may cause the application to be rejected and returned to the applicant.

For an EPEA approval renewal, this application must be completed and forwarded to the Alberta Environment and Water, at least six months prior to the expiry date of the existing Approval for the wastewater system. All applications must be forwarded to:

Alberta Environment and Parks
Regulatory Approvals Center
5th Floor, South Petroleum Plaza
9915 108 Street
Edmonton, AB T5K 2G8
Phone: 780-427-6311
Fax: 780-422-0154
E-mail: aep.epeaapplications@gov.ab.ca
FIGURE 1 - THE APPROVAL PROCEDURE FOR MUNICIPAL WASTEWATER SYSTEM

1. 
   APPLICANT

   APPLICATION MADE TO ALBERTA ENVIRONMENT AND WATER (AEW) TO OBTAIN A WASTEWATER APPROVAL UNDER EPEA

   WASTEWATER TREATMENT APPROPRIATE FOR RECEIVING STREAM

   AEW REVIEWS APPLICATION FOR COMPLETENESS

   IF APPLICATION IS NOT COMPLETE IT WILL BE RETURNED TO THE APPLICANT

   APPLICATION CONSIDERED COMPLETE - PUBLIC NOTICE PROVIDED, FIRST NATIONS CONSULTED WHERE APPROPRIATE

   TECHNICAL REVIEW

   APPLICANT IS DIRECTED TO ADDRESS CONCERNS RAISED BY STATEMENT OF CONCERN FILERS AND/OR FIRST NATIONS

   DIRECTOR DETERMINES IF CONSULTATION / DISCUSSION WAS ADEQUATE

   STATEMENT OF CONCERN FILERS AND APPROVAL HOLDERS HAVE RIGHT OF APPEAL ON THE APPROVAL DECISION

   ENVIRONMENTAL APPEALS BOARD HEARS APPEAL AND MAKES RECOMMENDATION TO THE MINISTER

   MINISTER MAKES FINAL DECISION ON APPEAL
Application Form and Guide for a New or Renewed Approval of a Municipal Mechanical Wastewater System

1.0 Administrative Information

1.1 Name of the Wastewater System:__________________________________________________________
Existing EPEA Approval No. (if applicable)______________________ Expiry Date:__________

1.2 Copies of the latest existing wastewater approval (if applicable) that were issued to the applicant in respect of the activity under this Act or a predecessor of this Act must be submitted in support of this application.

1.3 Legal land description of the wastewater treatment facility:
Land Location _____SEC____TWP_______RG_______M______
or other (i.e.: street address)___________________________________________
GPS Co-ordinates: Latitude:________________________ Longitude:________________________

1.4 Submission of a map / plan of the area showing the location of the following landmarks must be submitted in support of the application. The map should show:

(a) All lift stations;
(b) The wastewater treatment plant (including a process schematic of the plant);
(c) Any treated effluent storage (if applicable);
(d) The location of the disinfection facility if separate from the treatment plant (if applicable);
(e) Any and all treated effluent pump stations (if applicable);
(f) Any and all wastewater irrigation fields (if applicable);
(g) The treated effluent outfall (if applicable).

1.5 Corporate Name/Address/Phone of wastewater system owner (Municipality / Commission / Utility / Water Co-op / Company):

Name:______________________________________________________________
Address:___________________________________________________________
Contact Person:___________________________________ Position:__________
Telephone:_________________________ Fax:__________________________
Email Address:____________________________________________________

Is your organization registered with Corporate Registry?
Yes ☐ No ☐
1.6 Operating staff (proposed or current) and person(s) responsible for the day to day operation of the wastewater system:

<table>
<thead>
<tr>
<th>NAME OF OPERATOR(S)</th>
<th>POSITION</th>
<th>AEW CERTIFICATION</th>
<th>BUSINESS PHONE #</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

1.7 Have setbacks under the Municipal Government Act and/or the Environmental Protection and Enhancement Act been applied for and issued by the local Subdivision Approving Authority relative to this existing or proposed wastewater system?
Yes ☐ No ☐

If yes to Section 1.7, then please provide copies of all setbacks variances that have been issued for this wastewater system:
- Setback Waiver #1: Issued __________
- Setback Waiver #2: Issued __________
- Setback Waiver #3: Issued __________

If yes to Section 1.7, then please provide a map detailing the location of all properties and corresponding legal land locations relating to the setback variances that have been issued relative to this wastewater system.

1.8 As a requirement of the Environmental Protection and Enhancement Act (section 72), this activity/application must be advertised. Therefore, please provide the name of the newspaper(s) most widely distributed in the area where the facility is located. Also, you may suggest other methods of public notification.
(a) Newspaper(s):____________________________________________________
(b) Other methods:_____________________________________________________

2.0 First Nations Engagement (if applicable)

2.1 There is a duty to consult with First Nations where land management and resource development on Provincial Crown land may adversely impact First Nations Rights and Traditional Uses. Please contact the Approvals Coordinator and/or Aboriginal Relations Advisor for the Region to discuss this requirement.
3.0 Wastewater System (Technical Data)

3.1 Present population served by the wastewater system: ___________________________

3.2 Projected remaining life of the wastewater treatment plant: ______________________

3.3 Projected population at end of life for the wastewater treatment plant: ____________

<table>
<thead>
<tr>
<th>FLOWS</th>
<th>AVERAGE DAILY FLOW (M$^3$/DAY)</th>
<th>MAXIMUM DAILY FLOW (M$^3$/DAY)</th>
<th>PEAK HOURLY FLOW (LITRES / HOUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
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<tr>
<td>Design</td>
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</table>

3.4 Are there any other Municipality(ies), Development(s) Commissions / Co-ops / or Companies outside the municipal boundaries that discharge raw or partially treated wastewater into the wastewater collection system (other than septic truck haul)?

Yes ☐ No ☐

If yes, please provide a list of the systems, the name and phone number of the contact person(s) and approximate annual flows or population.

<table>
<thead>
<tr>
<th>NAME OF SYSTEM</th>
<th>CONTACT PERSON</th>
<th>PHONE NUMBER</th>
<th>ANNUAL FLOW (M$^3$) OR POPULATION</th>
</tr>
</thead>
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</table>

3.5 Does your wastewater system receive septic tank waste?  Yes ☐ No ☐

If Yes, please detail the septage management plan: (including septage hauler agreements yearly volume of septage, conditions of wastewater facility use, limitation of access, surveillance, sampling):

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
If No, please detail the concerns or circumstances that preclude septage from being received:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Is the septic waste metered?  Yes ☐  No ☐  Average monthly flows (m³)________

4.0 Raw Wastewater Collection System

4.1 Are there sanitary sewer use bylaw(s) in place to ensure the integrity of the wastewater treatment process?  Yes ☐  No ☐

4.2 Do the sanitary sewer use bylaw(s) either preclude discharge of some waste(s) or require pre-treatment for industrial or non-compatible waste?  Yes ☐  No ☐

If No, please explain:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4.3 Raw Water Pumping Stations (lift stations):

<table>
<thead>
<tr>
<th>LIFT STATION NUMBER AND LOCATION</th>
<th>EMERGENCY OVERFLOW / DISCHARGE ROUTE</th>
<th>POWER RATING (KW)</th>
<th>CAPACITY (L/S)</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
4.4 Raw Wastewater Equalization / surge tank Storage (if applicable):

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>APPROXIMATE EQUALIZATION CAPACITY (M$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<tr>
<td>Total Capacity:</td>
<td></td>
</tr>
</tbody>
</table>

4.5 Wastewater Treatment Plant Pumping:

<table>
<thead>
<tr>
<th>UNIT</th>
<th>POWER RATING (KW)</th>
<th>CAPACITY (L/S)</th>
</tr>
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<tbody>
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</tbody>
</table>

Total capacity of Treatment Plant pumps____________(L/s).

Description and location of fuel source for Treatment Plant pumping:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4.6 Wastewater Metering:

(a) Please list all flow monitoring locations:

i) Monitoring in the Treatment Process:
   A) Raw wastewater monitoring location:____________________________
   B) Treated wastewater monitoring location:________________________
   C) Other monitoring location:____________________________________

ii) In the wastewater collection system (i.e. residential, commercial, industrial, public/government, or any combination of):____________________
5.0 Wastewater Treatment System

5.1 Wastewater treatment for existing or proposed wastewater system is based on:

(a) Best Practicable Technology

(b) Receiving Water Quality Based Effluent Limits

5.2 Submission of findings / report to support the existing or proposed treated effluent discharge using Alberta Environment and Water’s Water Quality Based Effluent Limits Procedures Manual must be submitted in support the treatment process and discharge in support of the wastewater application and / or renewal (where applicable).

Date of Water Quality Based Effluent Limits procedure completion: _______________________

5.3 Wastewater Treatment Processes (indicate applicable equipment and mechanical treatment processes):

Preliminary Treatment:

(a) Wastewater Screening / Grit removal (pump protection):

   i) Coarse Screens:
      A) Trash Racks
      B) Coarse Bar Racks
      C) Course Screens

   ii) Fine Screens,

   iii) Grit Removal Facilities:
      A) Grit Channels
      B) Aerated Grit Chambers

Primary Treatment:

(a) Wastewater equalization

(b) Sedimentation / clarification

(c) Scum removal

(d) Sedimentation sludge removal
Secondary Treatment: (Best Practicable Technology):

(a) Aerated Lagoons (completely mixed type) □
   i) Maximum monthly average daily design flow: ____________________________

<table>
<thead>
<tr>
<th>CELL TYPE</th>
<th>NUMBER OF CELLS</th>
<th>DESIGN CAPACITY</th>
<th>HYDRAULIC RETENTION TIME (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Mixed</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Partially Mixed (indicate series or parallel)</td>
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<tr>
<td>Polishing</td>
<td></td>
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</tbody>
</table>

(b) Suspended Growth Wastewater Systems:

   i) Continuous Flow Activated Sludge:
      A) Conventional Plug flow □
      B) Complete mix □
      C) Step Aeration □
      D) Contact stabilization □
      E) Extended aeration □
      F) High Rate □
      G) High Purity oxygen □

<table>
<thead>
<tr>
<th>Process Modification</th>
<th>Flow Regime</th>
<th>Sludge Age</th>
<th>Detention Time (hours)</th>
<th>Activated sludge Return Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>Plug</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Complete mix</td>
<td>Complete mix</td>
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<tr>
<td>Step Aeration</td>
<td>Plug</td>
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<tr>
<td>Contact stabilization</td>
<td>Plug or complete mix</td>
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<tr>
<td>Extended aeration</td>
<td>Plug or complete mix</td>
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<tr>
<td>High Rate</td>
<td>Complete mix</td>
<td></td>
<td></td>
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<tr>
<td>High Purity oxygen</td>
<td>Complete mix reactors in series</td>
<td></td>
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</tbody>
</table>
(c) Sequencing Batch Reactors (SBR):

i) Intermittent feed and intermittent discharge (IFID)

ii) Continuous feed and intermittent discharge (CFID)

<table>
<thead>
<tr>
<th>BASIN TYPE</th>
<th>NUMBER OF TANKS</th>
<th>DESIGN CAPACITY</th>
<th>BYPASS ON EACH TANK (Y or N)</th>
<th>DRAIN ON EACH TANK (Y or N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBR tankage for continuous inflow</td>
<td></td>
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<tr>
<td>SBR tankage</td>
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</table>

(d) SBR – Decanters:

i) Floating decanter

ii) Fixed decanter

iii) Mechanically actuated surface skimmer

(e) Fixed Film Wastewater Systems:

i) Rotating Biological Contactor (RBC)
   A) Media type:
      1) standard density
      2) medium density
      3) high density
   B) Number of stages:

(f) Membrane System:

i) Membrane Bioreactor

<table>
<thead>
<tr>
<th>BASIN TYPE</th>
<th>NUMBER OF BASINS</th>
<th>DESIGN CAPACITY</th>
<th>Sludge Age</th>
<th>Detention Time (hours)</th>
<th>Activated sludge Return Ratio</th>
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<tbody>
<tr>
<td>Anoxic</td>
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<td>Anaerobic</td>
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<tr>
<td>Aerobic</td>
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A) Number and Type of membrane modules/cassettes:

B) Air scour for bioreactor membranes: (Y or N):

C) Air scour orientation / location: (Bottom or across membrane):
Tertiary Treatment: (Best Practicable Technology)

(a) Phosphorus Control:
   i) Biological Phosphorus Removal
   ii) Chemical Phosphorus Removal
   A) Chemicals used:
      1) 
      2) 
      3) 

(b) Nitrogen Removal:
   i) Biological Nitrogen Removal
   ii) Others, please specify: ____________________________________________
      A) Chemicals used:
         1) 
         2) 
         3) 

(c) Treated Effluent Disinfection

Sludge Treatment:

(a) Dewatering
(b) Thickening
(c) Digestion

Design information on sludge treatment / digesters:

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
(d) Method of sludge disposal:

Landfill: SEC____ TWP______RG______M_____
GPS Co-ordinates: Latitude:______________ Longitude:______________

Sludge storage/drying cell: SEC____ TWP______RG______M_____
GPS Co-ordinates: Latitude:______________ Longitude:______________

Sludge applied to land: SEC____ TWP______RG______M_____
GPS Co-ordinates: Latitude:______________ Longitude:______________

Other - please specify ______________________________________

**A Letter of Authorization must be obtained from the Regional Director of Alberta Environment and Water prior to sludge disposal to lands other than a landfill site or an approved sludge drying cell or as allowed in the EPEA approval.

Disinfection:

(indicate disinfection practiced where applicable)

(a) Type of Primary Disinfection:

Chlorine Gas ☐ Sodium Hypochlorite ☐
Calcium Hypochlorite ☐ Ozonation ☐
Chlorine Dioxide ☐ Ultra Violet ☐

Location of introduction of primary or main disinfection process ______________________

(b) Chlorine Gas Disinfection:

Size / weight / volume of chlorine gas containers being used: ______________________

Dechlorination of treated effluent:  Yes ☐ No ☐

If No, please detail the timeline for installation of the dechlorination equipment / process:

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

(c) Ozonation Disinfection:

i) Ozone Disinfection Type:

A) Low frequency ☐
B) Medium frequency ☐
C) High frequency ☐
ii) Ozone Contacting Type:
   A) Diffused bubble
   B) Positive pressure injection
   C) Negative pressure
   D) Mechanically agitated
   E) Packed tower

(d) Ozonation disinfection design considerations relating to:
   i) Corrosion protection: Yes ☐ No ☐
   ii) Ozone monitoring and / or leak detection system: Yes ☐ No ☐
   iii) Continuous ventilation system: Yes ☐ No ☐

(e) Ultra Violet Disinfection:
   i) Ultra Violet Disinfection equipment manufacturer:________________________
   ii) Type of Ultra Violet system:
       A) Low-pressure, low-intensity ☐
       B) Low-pressure, high intensity ☐
       C) Medium-pressure, high-intensity ☐
       D) Other:________________________
   iii) Orientation of Ultra Violet bulbs in UV disinfection reactors / system:
       A) In-line with effluent flow ☐
       B) Perpendicular to effluent flow ☐
   iv) Screens immediately upstream of Ultra Violet disinfection process:
       Yes ☐ No ☐
   v) Number of Ultra Violet disinfection channels:________________________
   vi) Capacity of Ultra Violet disinfection system:________________________
   vii) Ultra Violet lamp cleaning process:________________________
   viii) Ultra Violet Disinfection design considerations relevant to SBR (if SBR used): Yes ☐ No ☐
5.4 Inventory of all wastewater treatment chemicals used. (Please identify all the chemicals used seasonally or continuously, including enzymes, pH adjusters, and chlorine).

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>NSF APPROVED Y/N</th>
<th>CHEMICAL TYPE</th>
<th>POINT OF INJECTION / USE</th>
<th>SEASONAL / CONTINUOUS</th>
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5.5 Disposal and handling of wastes from wastewater from plant:

<table>
<thead>
<tr>
<th>TYPE OF WASTE STREAM</th>
<th>WASTE STORAGE LOCATION</th>
<th>METHOD OF WASTE DISPOSAL</th>
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</thead>
<tbody>
<tr>
<td>Screenings or grit</td>
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<tr>
<td>Scum and / or foam</td>
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<tr>
<td>Sludge from clarification / sedimentation</td>
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<tr>
<td>Dewatering / drain / bypass waste</td>
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<td></td>
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<tr>
<td>Sludge from phosphorus removal process</td>
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<tr>
<td>Wastewater from lab sink, floor drain(s), toilets and / or showers</td>
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<tr>
<td>Other (Specify)</td>
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<td>Other (Specify)</td>
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</tbody>
</table>
6.0 Treated Effluent Discharge

6.1 Treated effluent discharge method:

(a) Continuous direct discharge to watercourse or water body. □

Description and location of the treated effluent outfall:

________________________________________________________________________

________________________________________________________________________

Land Location ______ SEC ______ TWP ______ RG ______ M ______

or other (i.e.: street address) __________________________________________

GPS Co-ordinates: Latitude:______________ Longitude:______________

Dilution ratio for continuous discharge (stream flow:discharge) during lowest
stream flow:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(b) Continuous discharge to storage, then continuous/batch discharge to
watercourse or water body. □

Description, volume and location of the treated effluent storage:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Land Location ______ SEC ______ TWP ______ RG ______ M ______

or other (i.e.: street address) __________________________________________

GPS Co-ordinates: Latitude:______________ Longitude:______________

Description and location of the treated effluent outfall:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Description of the existing or proposed discharge times and durations from the treated effluent storage:

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Description of the discharge route:
Immediate:

____________________________________________________________________________________

Ultimate to:

____________________________________________________________________________________

Have easement(s) been obtained for the discharge route?  Yes ☐ No ☐ If No please explain:

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Dilution ratio for continuous discharge (stream flow:discharge) during lowest stream flow: (if applicable):

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

(c) Continuous discharge to storage, then wastewater irrigation.  ☐

Description, volume and location of the treated effluent storage:

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Land Location _______ SEC _______ TWP _______ RG _______ M _______

or other (i.e.: street address) _______________________________________

GPS Co-ordinates: Latitude:______________ Longitude:______________

Type of the irrigation system:
Permanent in-ground ☐
Hand move ☐
Wheel move ☐
Pivot ☐
Other: ______________________ ☐
Topographical description of the irrigated land(s):

____________________________________________________

____________________________________________________

____________________________________________________

Total land area irrigated: __________ hectares__________

Land Location ________SEC_______TWP_______RG______M______

Land Location ________SEC_______TWP_______RG______M______

Land Location ________SEC_______TWP_______RG______M______

GPS Co-ordinates: Latitude:___________ Longitude:_____________

GPS Co-ordinates: Latitude:___________ Longitude:_____________

GPS Co-ordinates: Latitude:___________ Longitude:_____________

Land irrigability study (as per EPEA Guidelines for Municipal Wastewater Irrigation) must be submitted for irrigated lands in support of this application:

Date of study completion:__________________________

Existing or Projected wastewater irrigation application volume (annual total):

_______________ mm (total).

Existing or Projected wastewater irrigation application rate:

_______________ mm/hr or mm/irrig. event

(d) Continuous or batch discharge to landlocked wetland. [ ]

Description, approximately area (hectares)2 and location of the wetland:

____________________________________________________

____________________________________________________

____________________________________________________

Land Location ________SEC_______TWP_______RG______M______

Land Location ________SEC_______TWP_______RG______M______

Land Location ________SEC_______TWP_______RG______M______

GPS Co-ordinates: Latitude:___________ Longitude:_____________

GPS Co-ordinates: Latitude:___________ Longitude:_____________

GPS Co-ordinates: Latitude:___________ Longitude:_____________
(e) Continuous or batch discharge to a wetland with subsequent discharge to a watercourse or water body.

Type of wetland:  Natural  Man Made/Designed  Hybrid

Purpose of wetland:
Wastewater treatment (recognized part of treatment train)  
Wastewater Polishing  
Additional Wastewater storage  
Other:  

Wetland Management Plans in place:  Yes  No

Volume and water level management  
Aquatic plant management  
Phosphorus management  

Description, volume and location of the treated effluent storage:  (pre-wetland - if applicable)


<table>
<thead>
<tr>
<th>Land Location</th>
<th>SEC</th>
<th>TWP</th>
<th>RG</th>
<th>M</th>
</tr>
</thead>
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</table>

GPS Co-ordinates: Latitude:  Longitude:
GPS Co-ordinates: Latitude:  Longitude:
GPS Co-ordinates: Latitude:  Longitude:

Description, approximately area (hectares²) and location of the wetland:


<table>
<thead>
<tr>
<th>Land Location</th>
<th>SEC</th>
<th>TWP</th>
<th>RG</th>
<th>M</th>
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GPS Co-ordinates: Latitude:  Longitude:
GPS Co-ordinates: Latitude:  Longitude:
GPS Co-ordinates: Latitude:  Longitude:
Description and location of the treated effluent outfall to watercourse:

________________________________________________________________________

________________________________________________________________________

Land Location ______ SEC_______ TWP_______ RG_______ M_______
GPS Co-ordinates: Latitude:_____________ Longitude:____________________

(f) Discharge to a subsurface soil disposal system  □

Diagram of the layout of disposal laterals must be included in support of this existing or proposed wastewater system.

Description, type, and location of the soil disposal field:

________________________________________________________________________

________________________________________________________________________

Land Location ______ SEC_______ TWP_______ RG_______ M_______
Land Location ______ SEC_______ TWP_______ RG_______ M_______
GPS Co-ordinates: Latitude:_____________ Longitude:____________________
GPS Co-ordinates: Latitude:_____________ Longitude:____________________
or other (i.e.: street address) ___________________________________________

Disposal laterals:
Diameter: ______________ mm
Number of laterals: __________
Length __________________ per lateral (meters)
Length __________________ total lateral (meters)
Depth of topsoil cover _______ cms

Soil Monitoring Plan: Yes □ No □
A Soil Monitoring Plan must be included in support of this existing or proposed subsurface wastewater disposal system.

Groundwater Monitoring Plan: Yes □ No □
A Groundwater Monitoring Plan must be included in support of this existing or proposed subsurface wastewater disposal system.
7.0 Laboratory and Monitoring (for existing EPEA Approved systems)

7.1 Extent of existing monitoring carried out by the Municipality / Commission / Company (fill in the appropriate monitoring and frequency).

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>INFLUENT (# of tests/week)</th>
<th>EFFLUENT (# of tests/week)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Grab</td>
<td>Composite</td>
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<tr>
<td>BOD\textsubscript{5}</td>
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<tr>
<td>Nitrification Inhibited BOD\textsubscript{5} (CBOD)</td>
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<tr>
<td>TSS</td>
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<tr>
<td>Total Phosphorus</td>
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<tr>
<td>Ammonia</td>
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<tr>
<td>Chlorine Residual</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

7.2 Monitoring and control proposed or carried out by the Municipality / Commission / Company system for the wastewater system:

SCADA system:  Yes ☐  No ☐

On-site ☐  Remote Process Monitoring ☐  Remote Process Control ☐

Description of the monitoring and control system (On-site):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Description of the monitoring and control system (Remote):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
8.0 Operations Plan

8.1 An operations plan must be submitted in support of this application. The operations plan shall contain the following:

(a) Routine Operational Procedures, which shall, at a minimum, include:

i) contact name and telephone numbers for the wastewater system owner, system operator, engineering consultants and equipment suppliers,

ii) roles and responsibilities of the organization (owner/management, operator(s), contractors, visitors),

iii) operating instructions:
   A) general description of the wastewater treatment process and operating procedures,
   B) performance requirements, and
   C) location of equipment major controls;

iv) general maintenance schedule, and

v) general maintenance instructions for:
   A) lift stations,
   B) wastewater treatment / process equipment,
   C) aeration compressors,
   D) monitoring equipment, and
   E) treatment plant pumping equipment;

(b) Routine Operational Procedures for Monitoring and Analysis, which shall, at a minimum, include:

i) operational and compliance tests to be performed,

ii) methods used for monitoring and analysis,

iii) locations of monitoring points,

iv) alternate laboratory sample analyses, and

v) laboratory data quality assurance information.

9.0 Emergency Response Plan

9.1 Confirmation that any emergency response plans that are required to be filed with the local authority or the municipality in which the activity is or is to be carried on or with Alberta Public Safety Services have been so filed must be submitted in support of this application.

Yes ☐ No ☐
9.2 A copy of any formal Emergency Response Plan must be submitted along with the Operations Plan. The Emergency Response Plan must outline the procedure that would be followed in the event of major problems with the wastewater system such as:

(a) bacteriological results exceeding the prescribed discharge limits;
(b) BOD / CBOD / TSS / TP / NH4 exceeding discharge limits;
(c) CBOD / COD / TSS / EC / SAR / pH / Faecal and Total Coliforms exceeding wastewater irrigation limits;
(d) Chlorine residual in treated effluent exceeding discharge limits;
(e) disinfection system failure;
(f) chemical overfeed;
(g) no chemical feed;
(h) raw wastewater influent quality problems;
(i) wastewater treatment plant failures;
(j) power failure;
(k) any unforeseen sudden or gradual releases of substances to the environment from lift stations and / or treatment plant;
(l) wastewater collection system / pipeline break, repair and clean-up;
(m) flood conditions;
(n) list of contacts; Alberta Environment and Water, Alberta Health, Regional Health Authorities, Fire Department, Disaster Coordinator, and other agencies.

10.0 Wastewater Application Signature

10.1 The *Environmental Protection and Enhancement Act* and Regulations, provide a specific definition for the "owner" and "person responsible for a wastewater system". Therefore, the person(s) responsible/person signing this document should be familiar with the applicable sections of the *Environmental Protection and Enhancement Act* and the Regulations. The sections of the *Environmental Protection and Enhancement Act* and Regulations that are of particular relevance to waterworks system are:
(a) Environmental Protection and Enhancement Act Part 2, Division 2 (Approvals and Certificates); Part 4 (Release of Substances); Part 10 (Enforcement);

(b) Activities Designation Regulation 276/2003;

(c) Approvals and Registrations Procedure Regulation 113/1993;

(d) Wastewater and Storm Drainage Regulation 119/1993;

(e) Wastewater and Storm Drainage (Ministerial) Regulation 120/1993.

I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete and accurate.

Printed Name of Person Signing

Title

Corporate Address

Corporate Postal Code

Corporate Telephone Number

Corporate Fax Number

Date of Application

Signature