

L I C E N C E A M E N D M E N T

PURSUANT TO THE PROVISIONS OF THE WATER ACT

LICENCE No. 00277161-00-00
FILE No. 00011868
PRIORITY No. 2011-05-02-003
AMENDMENT No. 00277161-00-01

Aquatera Utilities Inc.

The licence is amended as follows:

1. Change file number from 11868-A to 00011868.

Delete all conditions, including Schedule 1, and substitute with the following:

PART 1: DEFINITIONS

- 1.0 All definitions from the Act and the Regulations apply except where expressly defined in this licence.
- 1.1 In all parts of this licence:
 - (a) “Act” means the Water Act, RSA 2000, c.W-3, as amended;
 - (b) “Application” means the written submissions to the Director in respect of application number 003-00277161 and any subsequent applications for amendments of Licence No. 00277161-00-00;
 - (c) “Aquatera Diversion Works” means the infrastructure in place to divert water from the Wapiti River on the NW 24-070-06-W6, located at *Universal Transverse Mercator (UTM) coordinates Zone/Sector 11 U – Northing 6104696 and Easting 386200*, through the ‘Ex. 600 steel intake’ referred to in the plan in report 00227490-R001 titled *Existing Site Plan - Figure No. 2.1* in the *Aquatera Utilities Inc. Raw Water Supply Study Final Report* prepared by Stantec Consulting Ltd. dated 04 May 2005, referred to as ‘New # 3 Intake’ in the plan 11868-31 *Site Plan Showing Pumphouse, Intakes & Gravel Bar* prepared by the City of Grande Prairie dated October 28, 1987 (Sheet No. 1 of 4) and referred to in the plan 11868-33 titled *River Intake Structure No. 3* prepared by the City of Grande Prairie dated October 28, 1987 (Sheet No. 3 of 4);
 - (d) “Aquatera Regional Waterworks System” means the waterworks system owned by Aquatera Utilities Inc., operating under *Environmental Protection*

and Enhancement Act Approval No. 722-03-00, as amended, that serves the following areas:

- (i) City of Grande Prairie;
 - (ii) Town of Sexsmith;
 - (iii) Hamlet of Clairmont;
 - (iv) Hamlet of Wedgewood; and
 - (v) Expansion areas within the County of Grande Prairie No. 1 as identified in the '*County of Grande Prairie No. 1 2010 Ownership Map*,' as amended, prepared by Accurate Assessment Group Ltd. dated November 5, 2010, identified in Plan No. 11868-P035, forming part of the application;
- (e) "Continuous Rate" means the water or wastewater flow through equipment that creates an uninterrupted output of flow measurement;
- (f) "Cutback Threshold" means the rate of flow in the source of water at or below which reduced volumes of water diversion are permitted as set out in Appendix 1;
- (g) "Digital Regulatory Assurance System" means the Alberta Environment and Protected Areas secure internet website for submitting measuring and monitoring results electronically to the Director;
- (h) "Director" means an employee of the Government of Alberta designated as a Director under the Act;
- (i) "Diversion Table" means the Schedule titled " Schedule 1: Licence 00277161-00-01 Diversion Table – Wapiti River " in Appendix 1 which identifies the daily volume limitations that apply to the source of water;
- (j) "Downtime" means the period of time when equipment is not effectively functioning due to breakdown or any other unscheduled, unforeseen circumstance;
- (k) "Natural Flow" for the purpose of this licence is the greater of:
- (i) the rate of flow of water in the Wapiti River, within two kilometres upstream of the point of diversion, when determined by the Licensee; or
 - (ii) the rate of flow of water in the Wapiti River at the Water Survey of Canada Station No. 07GE001; or
 - (iii) an estimate of the rate of flow of water in the Wapiti River provided by the Director;

- (l) “Point of Diversion” means the raw water intake at the actual point of water removal from the Wapiti River through the Aquatera Diversion Works;
- (m) “Point of Return” means the ‘600 effluent outfall’ in the Wapiti River located in the NW 24-070-06-W6, located at *Universal Transverse Mercator (UTM) coordinates Zone/Sector 11 U – Northing 6104849 and Easting 386498*, as referred to in the plan in report 00227490-R001 titled *Existing Site Plan - Figure No. 2.1* in the *Aquatera Utilities Inc. Raw Water Supply Study Final Report* prepared by Stantec Consulting Ltd. dated 04 May 2005 and referred to in the plan 11868-28 titled *City of Grande Prairie Wastewater Treatment Project Effluent Outfall Line and Water Intake – Effluent Outfall Structure Details Revision No. 2/5* prepared by Stanley Associates Engineering Ltd. date July, 1982;
- (n) “Point of Use” means the areas in which the diverted water is used by the Licensee for the licenced purpose(s) that are served by the Aquatera Regional Waterworks System;
- (o) “Rate of Diversion” means the rate at which water is diverted from the source of water, measured at the raw water pump station pipeline to the water treatment plant at the Aquatera Utilities Inc. Water / Wastewater Treatment Facility;
- (p) “Rate of Return” means the rate at which treated wastewater is returned directly to the Wapiti River via a pipeline and diffuser, measured cumulatively from both the:
 - (i) treated plant effluent lagoon well at the Aquatera Utilities Inc. Water / Wastewater Treatment Facility; or
 - (ii) final storage lagoon at the Aquatera Utilities Inc. Water / Wastewater Treatment Facility;
- (q) “Regulations” means the regulations, as amended, enacted under the authority of the Act; and
- (r) “Service Population” means the water user population within the City of Grande Prairie, Town of Sexsmith, Hamlet of Clairmont, Hamlet of Wedgewood, Town of Wembley, and County of Grande Prairie No. 1 subdivisions and rural residential developments obtained from:
 - (i) the census data from the current Municipal Affairs Population List published on the Government of Alberta Municipal Affairs website; or
 - (ii) the Licensee providing an estimate of the population that is accepted in writing by the Director; and
- (s) “Treated Wastewater” means the treated wastewater discharged from the Aquatera Utilities Inc. Water / Wastewater Treatment Facility, located at 5306 100 Street, within the SE 11-071-06-W6, within the City of Grande Prairie, to the point of return.

PART 2: GENERAL

- 2.0 The Licensee shall immediately report to the Director by telephone any contravention of the terms and conditions of this licence at 1-780-422-4505.
- 2.1 The terms and conditions of this licence are severable. If any term or condition of this licence is held invalid, the application of such term or condition to other circumstances and the remainder of this licence shall not be affected thereby.
- 2.2 The Licensee shall not deposit or cause to be deposited any substance in, on, or around the source of water that has, or may have, the potential to adversely affect the source of water.
- 2.3 Unless otherwise specified in writing by the Director, the Licensee shall submit an application to the Director for the decommissioning of the works within six months after permanently ceasing operation of the works or diversion of the water.

PART 3: DIVERSION OF WATER

- 3.0 This licence is appurtenant to the following undertakings:
- (a) the diversion works at the actual point of intake through the Aquatera Diversion Works;
 - (b) the water supply pipeline referred to in Figure No. 2.2 – Raw Water Pipeline Upgrade Phases located in report 00227490-R001 titled Aquatera Utilities Inc. Raw Water Supply Study Final Report prepared by Stantec Consulting Ltd. dated 04 May 2005 to move water from the Wapiti River to the Aquatera Utilities Inc. Water / Wastewater Treatment Facility between the NW 24-070-06-W6 and SE 11-071-06-W6, forming part of the application; and
 - (c) the water distribution network in association with the Aquatera Regional Waterworks System.
- 3.1 The Licensee shall divert water only for the purpose(s) specified in this licence.
- 3.2 The Licensee shall divert water only from the source of water specified in this licence.
- 3.3 The Licensee shall divert water only from the Point(s) of Diversion.
- 3.4 The Licensee shall divert the water only to the Point(s) of Use.
- 3.5 The works used to divert the water authorized by this licence shall include, at a minimum, all of the following:
- (a) the pipeline referred to as 'Ex. 600 steel intake' in the plan in report 00227490-R001 titled *Existing Site Plan - Figure No. 2.1* dated January 2005, in the Aquatera Utilities Inc. Raw Water Supply Study Final Report prepared by Stantec Consulting Ltd. dated 04 May 2005, referred to in the plan 11868-31 - 'New # 3 Intake' in the plan titled *Site Plan Showing Pumphouse, Intakes & Gravel Bar* prepared by the City of Grande Prairie dated October 28, 1987

(Sheet No. 1 of 4) and referred to in the plan 11868-32 – *Profile of 0+00 Grid Line from Pumphouse to S. Side of Wapiti River* prepared by the City of Grande Prairie dated October 28, 1987 (Sheet No. 2 of 4), forming part of the Application; and

- (b) the intake structure referred to in the plan 11868-33 – *River Intake Structure No. 3* prepared by the City of Grande Prairie dated October 28, 1987 (Sheet No. 3 of 4) and referred to in the plan 11868-34 – *Details Water Intake #3, Caisson* prepared by the City of Grande Prairie dated October 28, 1987 (Sheet No. 4 of 4) located at *Universal Transverse Mercator (UTM) coordinates Zone / Sector 11 U – Northing 6104696, Easting 386200*, forming part of the Application.

3.6 Subject to 3.8, 3.9, 3.16, and 3.17, the Licensee shall not divert more than:

- (a) 9,000,000 cubic metres of water in any year when the service population is up to 75,000 people; or
- (b) 11,500,000 cubic metres of water in any year when the service population is between 75,001 to 100,00 people; or
- (c) 14,192,000 cubic metres of water in any year when the service population is greater than 100,001 people up to an estimated maximum service population of 136,675 people.

3.7 The Director may amend 3.6 based on a written request submitted by the Licensee to the Director along with supporting information explaining the volume of water currently being utilized for various purposes under this licence, and the need for a larger volume of water based in actual billing data, including but not limited to residential users, commercial users, industrial users, and truck fill loading stations.

3.8 When reaching at least 90% of the water diversion volume of the service population in 3.6(a) or 3.6(b), the Licensee shall submit a written request to the Director requesting a transition to the next diversion volume along with reasons for the request, including:

- (a) the estimated service population;
- (b) breakdown of the volume of water currently being utilized for various purposes under this licence, based on current billing, including but not limited to residential users, commercial users, industrial users, and truck fill loading stations; and
- (c) any other information requested in writing by the Director.

3.9 The Licensee shall not transition from the diversion volumes in 3.6(a) to 3.6(b) or 3.6(b) to 3.6(c) without first obtaining the written authorization of the Director.

3.10 The Licensee shall not divert water, pursuant to this licence, at a rate of diversion greater than 0.867 cubic metres per second.

3.11 If the Licensee is diverting water from this and other licences concurrently, the Licensee shall not divert water under this or any other licence:

- (a) at a cumulative rate of diversion greater than 1.303 cubic metres per second; or
- (b) at a rate of diversion greater than the licensed rate as specified below:

Water Licence	Diversion Volume (cubic metres)	Maximum Licensed Rate of Diversion (cubic metres per second)
<i>Water Resources Act</i> Licence No. 12114 (Approval ID 00038080)	7,278,600	0.436
<i>Water Act</i> Licence No. 00277161-00-00 (Approval ID 00277161)	14,192,000	0.867
TOTAL	21,470,600	1.303

3.12 The Licensee shall maintain the meters at each of the following locations:

- (a) the point of diversion for this licence and all other points of diversion from *Water Resources Act* Licence No. 12114 so the volume of diversion can be measured concurrently; and
- (b) the point of return for this licence which includes the following treated wastewater discharge sources:
 - (i) the pipeline leaving the treated plant effluent lagoon well located at the Aquatera Utilities Inc. Water/Wastewater Treatment Facility, and
 - (ii) the pipeline leaving the final storage lagoon located at the Aquatera Utilities Inc. Water/Wastewater Treatment Facility.

3.13 The meters in 3.12 must measure on a continuous basis:

- (a) cumulatively, the quantity of all water diverted at the locations in 3.12(a);
- (b) cumulatively, the quantity of treated wastewater returned to the Wapiti River at the locations in 3.12(b);
- (c) the instantaneous rate of diversion at each location in 3.12(a); and
- (d) the instantaneous rate of return at each location in 3.12(b).

3.14 The Licensee shall calibrate and maintain each measuring device referred to in 3.12 and 3.13 in accordance with manufacturer's specifications at all times.

3.15 During the diversion of water pursuant to this Licence, the Licensee shall:

- (a) determine the natural flow on a weekly basis, at a minimum, using one of the following methods:

- (i) by obtaining the Water Survey of Canada Station No. 07GE001 rate of flow data available on the Alberta Environment and Sustainable Resource Development website; or
 - (ii) by obtaining the rate of flow of water value from the Director, when the Water Survey of Canada Station No. 07GE001 is not recording natural flows and if the Director has such data; or
 - (iii) by an alternate method authorized in writing by the Director, as requested by the Licensee or determined by the Director.
- 3.16 The Licensee shall divert water authorized by this licence in accordance with the diversion table in Appendix 1.
- 3.17 The Licensee shall not divert more than the daily volume specified in Column B of the diversion table when the natural flow is less than the accompanying cutback threshold specified in Column A of the diversion table.
- 3.18 At all times when water is being diverted pursuant to 3.17, the Licensee shall:
- (a) maximize the return of treated wastewater to the Wapiti River or other water bodies in accordance with the terms and conditions of approvals issued under the Environmental Protection and Enhancement Act for the specific communities covered by those approvals; and
 - (b) return a total monthly volume of treated wastewater equal to or greater than 50% of the total monthly volume of water diverted pursuant to this licence, to the Wapiti River.
- 3.19 The treated wastewater referred to in 3.18 does not include treated wastewater that is diverted elsewhere pursuant to an authorization issued under the *Water Act*.
- 3.20 If the diversion works as specified in 3.0 and 3.5 are inoperable for any reason, the Licensee may use an alternative, temporary intake to divert water from the Wapiti River at NW-24-070-06-W6, provided all other licence conditions are met.

PART 4: MONITORING AND REPORTING

- 4.0 Unless otherwise authorized in writing by the Director, the Licensee shall:
- (a) measure the total volume of water diverted each day using the meter specified in 3.12;
 - (b) measure the total volume of water diverted each month using the meter specified in 3.12;
 - (c) measure the rate of diversion on a continuous basis using the meter specified in 3.12;
 - (d) measure the total volume of treated wastewater returned directly to the Wapiti River each day using the meter specified in 3.12;

- (e) measure the total volume of treated wastewater returned directly to the Wapiti River each month using the meter specified in 3.12;
 - (f) measure the rate of return of treated wastewater returned directly to the Wapiti River on a continuous basis using the meter specified in 3.12;
 - (g) determine or measure the natural rate of flow in the Wapiti River during diversion:
 - (i) at the Water Survey of Canada Station No. 07GE001 on a weekly basis when operating,
 - (ii) by obtaining the weekly value from the Director when the Water Survey of Canada Station No. 07GE001 is not operating, or
 - (iii) by an alternate method authorized in writing by the Director; and
 - (h) record on a weekly basis which licence, or combination of licences, the diversion of water is being undertaken from the Wapiti River at the point of diversion.
- 4.1 The Licensee shall record and retain all of the following information for a minimum of 5 years after being collected:
- (a) the place, date and time of all monitoring and measuring;
 - (b) the results obtained pursuant to 4.0; and
 - (c) the name of the individual who conducted the monitoring, measuring, and sampling stipulated in (a) and (b).
- 4.2 The Licensee shall report to the Director the results of the measuring and monitoring required in 4.0(a), 4.0(b), 4.0(d), 4.0(e), and 4.0(h) using the "Digital Regulatory Assurance System" (reference number DAUT0015560) and any other information required in writing by the Director.
- 4.3 The Licensee shall submit the report required in 4.2 to the Director on or before the end of the month following the month in which the information is based upon was collected.
- 4.4 At all times when continuous treated wastewater return flow ceases for water diverted under this licence, the Licensee shall compile a Low Flow Pump Inoperable Report which shall include, at a minimum, all of the following information:
- (a) the identification of the final effluent pump(s) and/or lagoon pump(s) being shut down;
 - (b) the time and duration the final effluent pump(s) and/or lagoon pump(s) were shut down;
 - (c) the reason for the treated wastewater return flow ceasing;

- (d) what action was taken to prevent this from occurring again;
 - (e) the monitoring and reporting information collected in 4.1; and
 - (f) any other information required in writing by the Director.
- 4.5 The Licensee shall submit the Low Flow Pump Inoperable Report to the Director on or before the end of the month following the month in which the incident occurred unless otherwise authorized in writing by the Director.
- 4.6 If the Low Flow Pump Inoperable Report is found deficient by the Director, the Licensee shall correct all deficiencies identified in writing by the Director, within the timeline specified in writing by the Director.

PART 5: REGIONAL WATERWORKS EXPANSION PLANS

- 5.0 The Licensee shall notify the Director in writing of proposed expansion areas at least 90 days prior to adding the following to the Aquatera Regional Waterworks System:
- (a) a Town; or
 - (b) a Hamlet.
- 5.1 The Licensee shall obtain a Letter of Authorization from the Director prior to connecting the Aquatera Regional Waterworks System to additional Towns or Hamlets.
- 5.2 The Licensee shall provide any additional information requested by the Director following receipt of the notification in 5.0.
- 5.3 The Licensee shall provide a map to the Director showing the water service areas by the following dates:
- (a) June 1, 2025;
 - (b) June 1, 2030;
 - (c) June 1, 2035;
 - (d) June 1, 2040; and
 - (e) June 1, 2045.

PART 6: WATER CONSERVATION PROGRAM

- 6.0 The Licensee shall prepare an Annual Water Conservation Plan every calendar year.
- 6.1 The Licensee's Water Conservation Plan shall include, at a minimum, all of the following information:
- (a) seasonal methods and strategies to reduce water usage during low flow periods in the Wapiti River at the point of diversion;

- (b) a public education plan;
 - (c) performance measures; and
 - (d) any other information required in writing by the Director.
- 6.2 The Licensee shall implement the initiatives of the most recent Water Conservation Plan unless otherwise authorized in writing by the Director.
- 6.3 The Licensee shall submit a Water Conservation Summary Report:
- (a) on or before February 28th of each year following the year in which the information on which the report is based was collected; or
 - (b) within a time period specified by the Director.
- 6.4 The Water Conservation Summary Report shall include, at a minimum, all of the following information:
- (a) results of implementing the Water Conservation Plan in the previous year;
 - (b) Water Conservation Plan details of the previous year; and
 - (c) any other information required in writing by the Director.

PART 7: AQUATIC HEALTH OF THE WAPITI RIVER

- 7.0 If at any time the Director determines that the aquatic environment of the Wapiti River is or will be adversely effected by the Licensee's operations, the Director may amend this Licence on his own initiative as outlined below:
- (a) amend conditions 3.16, 3.17, and 3.18 as appropriate to mitigate potential or actual adverse effects;
 - (b) by informing the Licensee in writing of any proposed licence amendments; and
 - (c) allowing the Licensee up to six months to implement the licence amendments requested by the Director.

PART 8: WAPITI RIVER MONITORING AND MITIGATION APPROACH PROGRAM

- 8.0 The Licensee shall prepare the Wapiti River Long Term Monitoring Program which looks at a long-term monitoring program for the Wapiti River and to monitor the cumulative effects operations have on the water quality and aquatic ecosystem health.
- 8.1 The Licensee shall implement the Wapiti River Long Term Monitoring Program proposal as authorized in writing by the Director.

PART 9: COMPLAINT INVESTIGATION

- 9.0 The Licensee shall:

- (a) Investigate all written complaints accepted by the Director relating to allegations of surface water and groundwater interference as a result of the diversion of the water or operation of the works; and
 - (b) provide a written report to the Director, within a time specified in writing by the Director, detailing the results of the investigation relating to the complaint accepted by the Director in 9.0(a).
- 9.1 The Licensee shall satisfy the Director that the report submitted pursuant to 9.0(b) has identified remedial and/or mitigative measures relating to the alleged interference.

December 13, 2024

DATED

DESIGNATED DIRECTOR UNDER THE ACT
Fidelma Horgan, P.Eng.

Appendix 1

Schedule 1: Licence 00277161-00-01 Diversion Table – Wapiti River

Water Survey of Canada Key Station #7GE001 (Wapiti River near Grande Prairie)

For Point of Diversion at or near NW-24-070-06-W6

Column A	Column B
Cutback Threshold (m3/s) WSC #7GE001	Cutback Volume (m3/day)
>6.5	No cutback
<=6.5	71,000
<=6	64,000
<=5.5	57,000
<=5	50,000
<=4.5	43,000
<=4	36,000
<=3.5	29,000
<=3	22,000
<=2.5	16,000
<=2	8,600