



**REGULAR COUNCIL MEETING AGENDA
CARSTAIRS MUNICIPAL OFFICE
MONDAY, SEPTEMBER 13, 2021, 7:00 PM**

Page

1. CALL TO ORDER

2. ADDED ITEMS

3. ADOPTION OF AGENDA

- a) Adoption of agenda of September 13, 2021
Motion: To adopt the agenda of September 13, 2021

4. ADOPTION OF MINUTES

- a) Adoption of minutes of August 23, 2021 (addendum 4.a)
Motion: To adopt the minutes of August 23, 2021



5. BUSINESS ARISING FROM PREVIOUS MEETING

6. DELEGATIONS

7. BYLAWS AND POLICIES

- a) Bylaw No. 2019 Scarlett Ranch Re-designation (addendum 7.a)



8. NEW BUSINESS

- a) ATCO Gas - Franchise Agreement (addendum 8.a)



9. COMMITTEE REPORTS

- a) LEGISLATIVE & EMERGENCY SERVICES COMMITTEE
- b) STRATEGIC PLANNING & CORPORATE AFFAIRS COMMITTEE
- c) EXTERNAL RELATIONS COMMITTEE
- d) POLICY & GOVERNANCE COMMITTEE
- e) MOUNTAIN VIEW REGIONAL WASTE COMMISSION
- f) MOUNTAIN VIEW REGIONAL WATER COMMISSION
- g) MOUNTAIN VIEW SENIORS HOUSING

- h) MUNICIPAL AREA PARTNERSHIP
- i) CARSTAIRS COMMUNITY DEVELOPMENT & ECONOMIC PARTNERSHIP
- j) CENTRAL ALBERTA ECONOMIC PARTNERSHIP

10. COUNCILOR REPORTS

- a) COUNCILOR BLAIR
- b) COUNCILOR WILCOX
- c) COUNCILOR GREEN
- d) COUNCILOR ALLAN
- e) COUNCILOR RATZ
- f) COUNCILOR GIL
- g) MAYOR COLBY

11. CORRESPONDENCE

9 - 27

- a) Alberta Environment & Parks - Compliance Inspection of the Carstairs Waterworks System (addendum 11.a)



12. CAO'S REPORT

13. COUNCILOR CONCERNS

14. PUBLIC QUESTION PERIOD

15. MEDIA QUESTION PERIOD

16. CLOSED MEETING

17. ADJOURNMENT

MINUTES OF THE REGULAR COUNCIL MEETING
MONDAY, AUGUST 23, 2021, 7:00 P.M.
CARSTAIRS MUNICIPAL OFFICE

ATTENDEES:	Mayor Colby, Councilors Wilcox, Green, Allan, and Ratz, CAO Carl McDonnell, Director of Legislative & Corporate Services Shannon Allison, and Recording Secretary Amy Phillips
ABSENT:	R. Blair, A. Gil
CALL TO ORDER:	Mayor Colby called the meeting of August 23, 2021, to order at 6:59 p.m.
ADDED ITEMS:	Nil
ADOPTION OF AGENDA:	
Motion 273/21	Motion by Councilor Allan to accept the Regular Council agenda of August 23, 2021, as presented. CARRIED
ADOPTION OF PREVIOUS MINUTES:	
Motion 274/21	Motion by Councilor Ratz to adopt the Regular Council minutes of July 12, 2021, as presented. CARRIED
BUSINESS ARISING FROM PREVIOUS MEETING:	Nil
DELEGATIONS:	Nil
BYLAWS & POLICIES:	Nil
NEW BUSINESS:	1. Subdivision Application – 12 Avenue - Tyler Olsen, ISL Engineering and Land Services Ltd., gave an oral report
Motion 275/21	Motion by Councilor Green to accept the Subdivision Application as information. CARRIED
COMMITTEE REPORTS:	1. Legislative & Emergency Services Committee - Next meeting will follow the Election 2. Strategic Planning & Corporate Affairs Committee - Next meeting will follow the Election 3. External Relations Committee - Next meeting will follow the Election 4. Policy & Governance Committee - Next meeting will follow the Election 5. Mountain View Regional Waste Commission - Councilor Green gave an oral report on the August 12, 2021, meeting 6. Mountain View Regional Water Commission - Mayor Colby gave an oral report on the July 14, 2021, meeting - Next meeting is on September 8, 2021 7. Mountain View Seniors’ Housing - Have been attending Meet-and-Greets with various residents - Next meeting is on August 26, 2021 8. Municipal Area Partnership - Next meeting is at the call of the chair 9. Carstairs Community Development & Economic Partnership (CCD&EP) - Next meeting is on September 1, 2021 10. Central Alberta Economic Partnership (CAEP) - Next meeting is in the fall

Motion 276/21 Motion by Councilor Green to accept all Committee Reports as information.
CARRIED

COUNCILOR REPORTS: **Councilor Ratz**
- Attended Meet-and-Greets with residents at various Seniors' Housing facilities
Councilor Wilcox
- Attended the Parenting Fair on August 21, 2021; very good turnout
Councilor Allan
- Attended the Parenting Fair on August 21, 2021
Councilor Green
- Attended Mountain View Regional Waste Commission meeting on August 12, 2021
Councilor Gil
- Nil
Councilor Blair
- Nil
Mayor Colby
- Attended Mountain View Regional Water Commission meeting on July 14, 2021

Motion 277/21 Motion by Councilor Wilcox to accept all Councilor Reports as information.
CARRIED

CORRESPONDENCE: 1. Alberta Minister of Health, Tyler Shandro – COVID-19
2. Crowsnest Pass – Bill C-21 Changes to the Criminal Code and Firearms Act
3. Town of Claresholm – RCMP Retroactive Pay
4. Town of Claresholm – Code of Conduct
5. Didsbury & District Historical Society – Scarecrows on Parade

Motion 278/21 Motion by Councilor Ratz to accept all correspondence as information.
CARRIED

CAO'S REPORT: Nil

COUNCILOR CONCERNS: 1. Councilor Ratz and Councilor Wilcox never received any official concern, but have heard concerns about the new Brar Brothers Auto Parts business. CAO commented that one phone call and four emails were received.

Motion 279/21 Motion by Councilor Wilcox to accept all Councilor Concerns as information.
CARRIED

PUBLIC QUESTION PERIOD: 1. In regards to the Subdivision application; is there anything to stop that lot from being rezoned in the future?
CAO commented that Council would have to approve any future applications, should there be one.
2. For the new Brar Brothers Auto Parts business, with there being parts storage and used cars, are there restrictions for traffic going across railway tracks?
CAO commented that the application was approved due to traffic being minimum

Motion 280/21 Motion by Councilor Green to accept the Public Question Period as information.
CARRIED

MEDIA QUESTION PERIOD:	Nil	
CLOSED MEETING SESSION:	1. Personnel	
Motion 281/21	Motion by Councilor Allan that Council closes the meeting to the Public at 7:30 p.m. to discuss closed meeting items.	CARRIED
Motion 282/21	Motion by Councilor Green to come out of the closed meeting session at 8:20 p.m.	CARRIED
Motion 283/21	Motion by Councilor Allan to authorize administration to enter into agreement with HDR Corporation to conduct a Train Whistle Cessation Assessment.	CARRIED
Motion 284/21	Motion by Councilor Ratz to authorize administration to proceed with the sale of Lot 20 Block 3 Plan 0212608; subject to the terms of the offer and the registration of a Drainage Right-of-Way on the property.	CARRIED
NEXT MEETING:	Monday, September 13, 2021	
ADJOURNMENT:		
Motion 285/21	Motion by Councilor Wilcox to adjourn the meeting of August 23, 2021, at 8:24 p.m.	CARRIED

Lance Colby, Mayor

Carl McDonnell, CAO

Bylaw No. 2019

BEING a bylaw of the Town of Carstairs of the Province of Alberta to amend Land Use Bylaw 2007.

WHEREAS, Council of the Town of Carstairs wishes to amend Land Use Bylaw No. 2007 by providing a Land Use Re-designation to rezone 0.46 hectares (1.14 acres) of land, from C1 to R3, located in Lot 15 Block 11 within the SE 1/4 8-30-01-W5M, and 0.99 hectares (2.44 acres) of land from R4 to R3 located in Lot 16 Block 11 within the SE 1/4 8-30-01-W5M as listed on Schedule A;

AND WHEREAS, the requirements of the *Municipal Government Act* Revised Statutes of Alberta 2000, Chapter M-26 regarding the advertising of this Bylaw have been complied with;

AND WHEREAS, copies of this Bylaw and related documents were made available for inspection by the public at the Town office as required by the *Municipal Government Act* Revised Statutes of Alberta 2000, Chapter M-26;

NOW THEREFORE, the Council of the Town of Carstairs in the Province of Alberta, duly assembled and pursuant to the *Municipal Government Act* Revised Statutes of Alberta 2000, Chapter M-26 enacts as follows:

Schedule “A”

Map 1 of the **Land Use District Map** would be amended to include **Lot 15 Block 11, SE 1/4 8-30-01-W5M, consisting of 0.46 hectares (1.14 acres) and shall be re-designated from C1 (Central Commercial District) to R3 (Medium Density Residential), and Lot 16 Block 11, SE 1/4 8-30-01-W5M, consisting of 0.99 hectares (2.44 acres) shall be re-designated from R4 (High Density Residential) to R3 (Medium Density Residential)**

As shown on the attached map identified as “Schedule A”.

This By-Law shall come into force and effect on the date of the final passing thereof.

READ A FIRST TIME THIS 10TH DAY OF SEPTEMBER, A.D, 2021

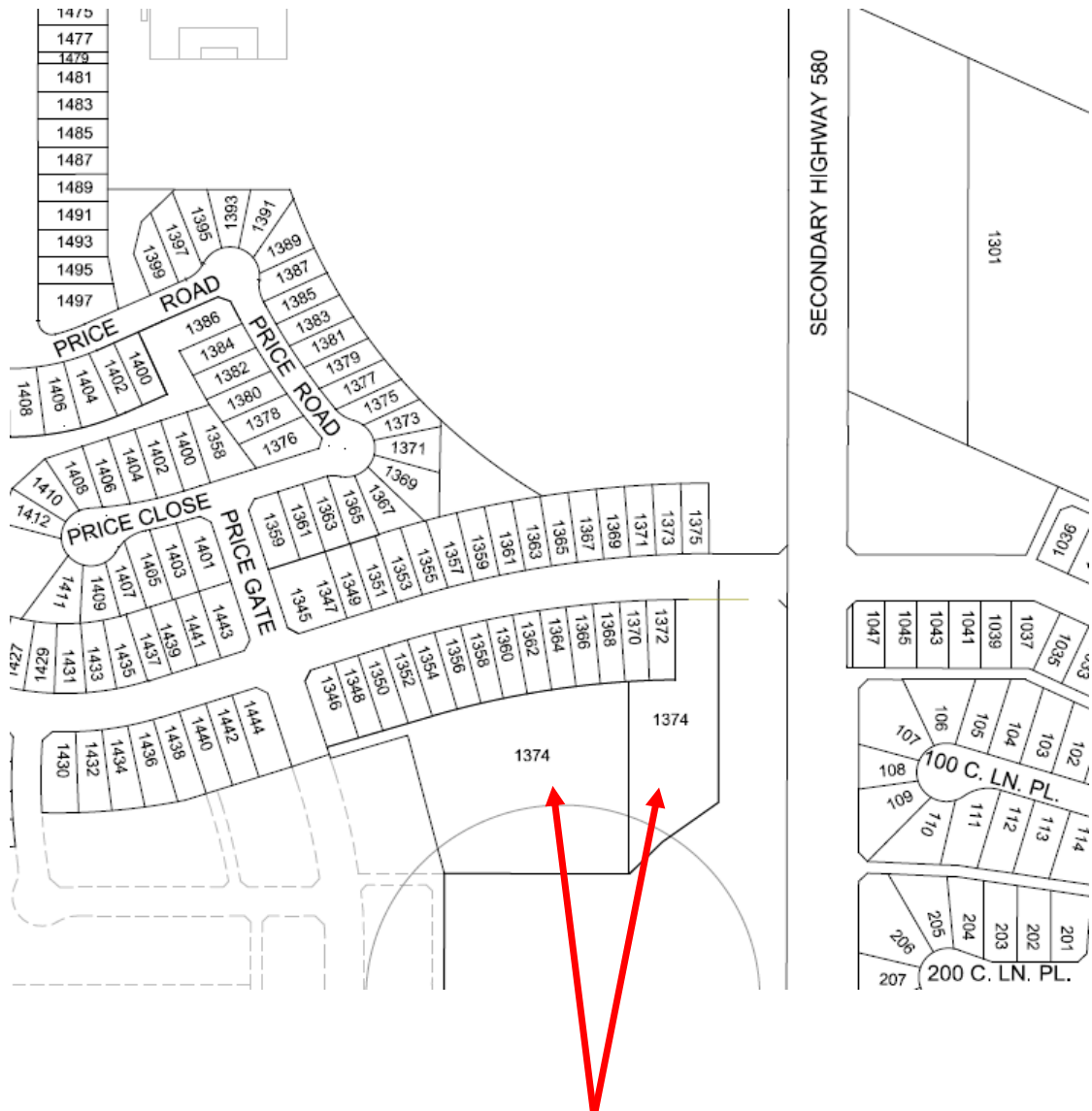
READ A SECOND TIME THIS 10TH DAY OF SEPTEMBER, A.D., 2021

READ A THIRD AND FINAL TIME THIS XX DAY OF XX A.D., 20XX

Mayor, Lance Colby

CAO, Carl McDonnell

Schedule A





August 20, 2021

Town of Carstairs
PO Box 370
Carstairs, AB T0M 0N0

Attention: Mr. Carl McDonnell, Chief Administrative Officer

RE: ATCO Gas and Pipelines Ltd. Franchise Agreement


Pursuant to our franchise agreement, your municipality has the ability to change the franchise fee percentage in 2022; this request must be received by ATCO Gas in writing prior to November 1st, 2021. If you are considering changing the franchise fee in 2022, please contact us as soon as possible to begin the process.

As you are aware, ATCO Gas pays the Town of Carstairs a franchise fee. The franchise fee is collected from customers in the community based on a percentage of our Delivery Tariff. In the Town of Carstairs, this percentage is 25.00%.

In 2020, our Delivery Tariff revenue in the Town of Carstairs was \$990,911. Our forecast Delivery Tariff revenue for 2022 is \$1,254,219. Therefore, based on the current franchise fee percentage, the forecast 2022 franchise fee revenue would be \$313,555.

We trust you will find this information useful, and, if you have any questions or require anything further, please do not hesitate to contact me at Jamie.Jaques@atco.com.

Yours truly,


Jamie Jaques
Manager, Calgary
ATCO Natural Gas Division





Regulatory Assurance Division
Southern Region
2nd Floor, 2938 – 11 Street NE
Calgary, AB T2E 7L7
Telephone: 403-297-8271
Fax: 403-297-8232
<https://www.alberta.ca/environment-and-parks.aspx>

August 31, 2021

Carl McDonnell, CAO
Town of Carstairs
844 Centre Street
PO Box 370
Carstairs, AB T0M 0N0

Subject: Compliance Inspection of the Carstairs Waterworks System

Alberta Environment and Parks completed a compliance inspection at the above noted facility on August 18th, 2021. At the time of the inspection, the waterworks was required to be in compliance with their waterworks Registration No. 501 and amendments, as issued under the *Environmental Protection and Enhancement Act (EPEA)*. The inspection was conducted with certified operators Corriena Fox and Rob Alcorn.

A risk based inspection assessment was completed by Alberta Environment and Parks and the Carstairs Waterworks was found to have no health, operational or administrative risks. A copy of the inspection assessment is enclosed for your records. Please review the comments section for each question as well as the overall inspection summary. This will assist the registration holder in understanding how the specific risks were identified during the inspection.

If you have any questions pertaining to this report or require any additional information, please contact me at 403-297-5925 or via email at larry.west@gov.ab.ca.

Yours truly,

A blue ink signature of Larry West, written over a blue circular stamp.

Larry West
Environmental Protection Officer

Enclosures (2)

cc: Craig Knaus, District Compliance Manager (Alberta Environment and Parks)
Corriena Fox, Town of Carstairs

Classification: Protected A

AEP WATERWORKS

INSPECTION REPORT

Submitted

Health Risk: PASS
Operational Risk: PASS
Administrative Risk: PASS

Waterworks System Name: Carstairs Waterworks System Approval Registration# 501
Approval Holder: Town of Carstairs Approval Expiry Date:
Plant Classification (Type): Distribution System Plant Classification (Level): N/A WD Level 2
(Water Treatment) (Water Distribution)

FACILITY

Address: Street: PO Box 370
Town: Carstairs Province: AB Postal Code: T0M 0N0
Facility Contact Number: 403 - 337 - 3446 Facility Emergency Contact Number: 403 - 337 - 3446
Facility Location GPS: Latitude: (e.g. 51.1235) Longitude: (e.g.-114.2168)
Diversion Location GPS: Latitude: (e.g. 51.1235) Longitude:(e.g.-114.2168)

Water Diversion Licence No: Through MVRWSC Municipal/Industrial Facility: Municipal Source: MVRWSC
Daily Peak Flows (m3): ~ 2100 m3/day Population served: 4077 Number of Connections: ~ 1800
Renewal Application Submitted(yes/no): Yes ☐ No: ☒ Daily Average Flows (m3): ~ 1100 m3/day

OPERATOR AND INSPECTOR

Operator's Certification Level: (Interviewed only)
Operator's Name: Corriena Fox Select Water Treatment Certification Level: N/A Select Water Distribution Certification Level: WD Level 2
Inspector's Name: Barry West Inspector's District: SSR-Calgary Inspection Number: August 2021
Date and Time of Inspection: 2021/08/16 2:03 PM Date of previous Inspection: 2019-03-27

GENERAL CONDITIONS

Are there any Short-Term Approval Conditions? Yes ☐ No ☒ (If Yes, answer B & C)
What are the Short Term Approval Condition required due dates? n/a
Have these Short Term Approval Conditions been achieved? n/a
Have there been any changes to the waterworks system since the last EP inspection? See comments below.

INSPECTION SUMMARY COMMENTS

Overall the inspection passed the assessment and no health, operational or administrative risks were identified.

The town has replaced 3 of the 4 water distribution pumps and added in a new VFD controller as well as updated the SCADA system. The main feeder line from Anthony Henday WTP has been twinned as well. Some older cast iron water mains have also been replaced with PVC.

Health Risk Assessment Questions

1	Are chlorine/ozone residual and contact time (CT) ratio requirements met entering the distribution system at the point where CT is calculated? This question applies to all waterworks facilities that have chlorine/ozone residual and contact time limits (for either Giardia and/or viruses) specified in their Approval or Code of Practice (COP) Registration.	<input checked="" type="radio"/>	N/A
		<input type="radio"/>	1. Unreported failure to achieve Approval/COP limit.
		<input type="radio"/>	2. Reported failure to achieve Approval/COP limit but appropriate follow up actions were not taken by the operator(s) and a drinking water safety concern resulted.
		<input type="radio"/>	3. Meets Approval/COP limits at all times or if a contravention is reported the incident response resolved the issue so that no drinking water safety concerns resulted.
		<input type="radio"/>	4. Meets best practice with chlorine residuals between 0.2-2.00 mg/L at the point that CT's were achieved and all CT Disinfection ratios were greater than 1.0.

Comments:

2	Are treated water turbidity (prior to entering clearwell reservoir) limits met?	<input checked="" type="radio"/>	N/A
		<input type="radio"/>	1. Unreported failure to achieve approval limit.
		<input type="radio"/>	2. Reported failure to achieve Approval/COP limit but appropriate follow up actions were not taken by the operator(s) and a drinking water safety concern resulted.
		<input type="radio"/>	3. Meets approval limits for the monitoring required or if a turbidity contravention is reported the incident response resolved the issue so that no drinking water safety concerns resulted.
		<input type="radio"/>	4. The waterworks system has been upgraded to meet AEP's 2012 Standards and Guidelines for turbidity reduction for each filter (i.e. <0.3 NTU for dual media filtration systems or <0.1 NTU for membrane filtration systems in 99% of the samples) with continuous monitoring and data capture off each filter are in place to verify that treated water turbidity limits were met. The system also has filter to waste capability.

Comments:

		<input checked="" type="radio"/>	N/A
		<input type="radio"/>	1. Unreported failure to achieve Approval limit.

3	Are UV disinfection approval requirements met (Typically includes UV reactor flow limits, UV transmittance (%T) limits and UV dose limits)?	<input type="radio"/>	2. Reported failure to achieve Approval/COP limit but appropriate follow up actions were not taken by the operator(s) and a drinking water safety concern resulted.
		<input type="radio"/>	3. Meets Approval limits at all times or if a contravention is reported the incident response resolved the issue so that no drinking water safety concerns resulted.
		<input type="radio"/>	4. Meets Approval limits at all times for UV reactor flow, UV dosage, and UV transmittance with alarms and system shutdowns in place to prevent any improperly UV disinfected water from entering the clearwell/distribution system. The approval/registration holder calibrates the UV sensor against a reference sensor on an annual basis (this device will compare the UV sensor dose generated by the reactor to a reference standard).
Comments:			
4	Is the operator's certification (includes back-up operators) appropriate for the facility?	<input type="radio"/>	N/A
		<input type="radio"/>	1. Operator(s) is under certified with no supervision (or back-up) by an appropriately certified operator.
		<input type="radio"/>	2. Operator(s) is under certified and is working under the remote supervision of an appropriately certified operator(s) but does not meet the requirements of the 'Waterworks Systems Attendance' section of the Water and Wastewater Operators' Certification Guidelines.
		<input type="radio"/>	3. Attending operator(s) is certified to the level of the facility and meets the requirements of the 'Waterworks Systems Attendance' section of the Water and Wastewater Operators' Certification Guidelines. Back-up operator(s) can be under certified, but working under the direction of a certified operator (s).
		<input checked="" type="radio"/>	4. For each level of certified operator required by the Approval or Code of Practice an equivalent number of certified operators must be available as back up. Note: A conditional certificate can't be used to achieve a rating of four.
Comments: There are currently 2 certified operators employed by the Town of Carstairs: Correina Fox #4360, WD II (also Manager of Operational Services), and Robert Alcorn WD II. Robert McKay #3091, WD II was formerly certified but has let his certification lapse.			
		<input type="radio"/>	N/A
		<input type="radio"/>	1. Unreported failure to achieve Approval/COP limit.

5	Are Approval/Code of Practice (COP) chlorine residual (secondary disinfection in the distribution system) limits met?	<input type="radio"/>	2. Reported failure to achieve Approval/COP limit but appropriate follow up actions were not taken by the operator(s) and a drinking water safety concern resulted.
		<input checked="" type="radio"/>	3. Meets Approval/COP limits at all times or if a contravention is reported the incident response resolved the issue so that no drinking water safety concerns resulted.
		<input type="radio"/>	4. Meets best practices (residuals between 0.1 – 2.0 mg/L) at all times.
<p>Comments:</p> <p>For 2020 the following chlorine residuals were reported:</p> <p>For the Carstairs distribution system the range of free chlorine residuals was 0.08 - 1.86 mg/L and for total chlorine from 0.38 - 2.20 mg/L.</p> <p>In 2021 to date the readings varied from 0.32 - 1.58 mg/L free chlorine and 0.44 mg/l - 1.66 mg/L total chlorine. This is based on 7 day a week testing conducted by the operators.</p>			
6	Is the monitoring frequency being met for treated water bacteriological sampling in the distribution system as specified by the approval or COP registration, the “Guidelines for Canadian Drinking Water Quality (GCDWQ)” and “Action Protocol for Failed Bacteriological Sampling Results in Drinking Water” (Bac-T protocol)? Notes: - for Code of Practice for a Waterworks System Consisting Solely of a Water Distribution System for a small water system (less than 1500 people and less than 10 km of distribution system), only 1 sample per 500 population per month. - it is not considered additional bacteriological monitoring when bacteriological samples are collected once per week and 5 sample weeks occur in the month.	<input type="radio"/>	N/A
		<input type="radio"/>	1. Unreported failure to meet bacteriological monitoring frequency requirement.
		<input type="radio"/>	2. Reported failure to meet required bacteriological monitoring but appropriate follow up actions were not taken by the operator(s) and a drinking water safety concern resulted.
		<input type="radio"/>	3. The bacteriological monitoring conducted in the distribution system consists of evenly spaced, weekly samples collected throughout the distribution system as specified or if a contravention is reported the incident response resolved the issue so that no drinking water safety concerns resulted.
		<input checked="" type="radio"/>	4. In addition to the requirements in 3, additional monthly bacteriological monitoring is conducted in each month of the year in the distribution system, in conjunction with chlorine residual monitoring. Re-samples and samples collected after repairs have been made in the distribution system are not counted for the purposes of additional compliance monitoring.
<p>Comments:</p> <p>Two samples per week are collected by the operators one from the pumphouse/reservoir and the second from one of approximately 14 locations in the Town.</p> <p>Samples are normally collected on Tuesdays.</p>			
	Were emergency situations (such as failure to meet chlorine/ozone residual limits, contact times, ultra violet disinfection limits, membrane log reduction credits, turbidity limits, bacteriological quality requirements, loss of positive pressure, etc.) dealt with as required by the Approval, Code of Practice (COP), or legislation? Definition: an emergency is defined as a situation where one or more of the	<input type="radio"/>	N/A
		<input type="radio"/>	1. Operators did not recognize emergency situations where action was mandated or failed to take the appropriate actions necessary to address emergency situations.
		<input type="radio"/>	2. Some emergency actions taken, but not as required.

7	<p>treatment or disinfection barriers (coagulation, filtration, chlorine, ozone or UV) fail, an exceedance of the treated water quality limits specified in the approval/COP or an issue in the water distribution system that has or may, impact potable water quality (i.e. reservoir contamination, major or uncontrolled loss of pressure or possible contamination of water supply). This includes when a Boil Water Advisory or Water Use Advisory has been issued by Alberta Health Services.</p>	<input type="radio"/>	<p>3. Appropriate emergency actions taken as required, and reported in a complete and timely manner.</p>
		<input checked="" type="radio"/>	<p>4. No emergency actions were necessary during the previous two (or more) years or where emergency actions were required the Drinking Water Safety Plan was reviewed and/or revised to reflect the lessons learned from the emergency incident.</p>
<p>Comments:</p> <p>No emergency situations arose in the Town in the past couple of years since the last AENV inspection. According to the operator the Town's pro-activeness in replacing older water mains has resulted in far fewer water breaks.</p>			
8	<p>Have Approval/Code of Practice (COP) and Potable Water Regulation contraventions for the Health Risk assessment been properly reported? Reportable contraventions from the Health Risk section may include: not meeting monitoring limits or frequency (for chlorine residual, contact time, turbidity, or UV disinfection [flow, transmittance, or dose limits]) prior to entering or within the distribution system; not having required operator certification/attendance; not meeting bacteriological monitoring frequency; and/or not responding to an emergency situation as required.</p>	<input type="radio"/>	<p>N/A</p>
		<input type="radio"/>	<p>1. Have had unreported contraventions, or operator(s) failed to notice when contraventions occurred that should have been reported.</p>
		<input type="radio"/>	<p>2. Contraventions are reported but not as required (i.e. no written report(s) submitted, late reports, incomplete reports, or reports sent to the wrong location).</p>
		<input type="radio"/>	<p>3. Contraventions reported properly with complete and appropriate written follow-up that resulted in the resolution of the issue(s) or no health related contravention reports were required during the reporting period</p>
		<input checked="" type="radio"/>	<p>4. In addition to the requirements of point 3 above, contraventions are tracked and reviewed to identify any reoccurring incidents or issues in an effort to minimize or prevent future reoccurrences.</p>
<p>Comments:</p> <p>According to the operators no health contraventions required reporting since the last AENV inspection.</p>			
8.1	<p>Does treated water meet the GCDWQ parameters based on the sampling required for the facility?</p>	<input type="radio"/>	<p>N/A</p>
		<input type="radio"/>	<p>1. One or more parameters exceed the Maximum Acceptable Concentration (MAC), or required MAC sampling data is incomplete (excludes naturally occurring fluoride up to 2.4 mg/L in which no treatment is provided).</p>
		<input type="radio"/>	<p>2. All Maximum Acceptable Concentration requirements are met except Trihalomethanes (THMs), Halo Acetic Acids (HAA's), or bromate where required or one of the above parameters were missed.</p>
		<input type="radio"/>	<p>3. All Maximum Acceptable Concentration requirements are met for the parameters required to be tested or if a MAC exceedance occurs the appropriate remedial actions are taken to deal with the exceedance (these actions would include immediate reporting to AEP/AHS, following the chemical exceedance protocol, completing a review of the waterworks system operations or infrastructure to see if changes can be made to address the MAC exceedance, implementation (if reasonably practical) of changes to waterworks system to address the MAC exceedance or formally bringing the issue to the attention of the water</p>

	provider to see if actions can be taken to address the MAC exceedance.	
	<input checked="" type="radio"/> 4. All Maximum Acceptable Concentration and Aesthetic Objective (AO) requirements are met. (Note: For a water distribution system to achieve a (4) rating additional sampling is required by the registration holder or the most recent sample results from their treated water supplier are to be obtained and provided to AEP).	
<p>Comments:</p> <p>based on the water quality results shared with AENV both THM and lead levels were below their respective MAC's. THM sampling is conducted every three years (last done in 2020) as required by the COP.</p> <p>The Town is about 1/2 through their lead testing and has not found any results above the new MAC.</p>		
HEALTH RISK ASSESSMENT:		PASS
HEALTH RISK ASSESSMENT COMMENTS:		

Operational Risk Assessment Questions

9	<p>Is the monitoring equipment (portable, bench top, and continuous on-line meters) used to verify compliance properly maintained and calibrated? Has a data validation program been implemented and is it being followed? These components are to be completed by a qualified person(s). Notes: - the data validation portion of this question does not apply to those waterworks systems that do not use continuous monitoring equipment to verify compliance with their Approval or COP Registration. -All continuous monitoring equipment including turbidity/chlorine meter readings, flow rates, volumes, particle counts, UV Intensity/dose and Transmittance readings, etc., must be validated to ensure that the results reflect the actual quality of the water being sampled. Examples of erroneous data results are when air bubbles in the turbidity meter affect the readings or when reduced/increased sample flow through the chlorine residual analyzer or turbidity meter changes the readings. - A data validation program should also include an established protocol to compare continuous analyzer results with those of another representative sample and with tolerance limits established for how far apart the comparison readings shall be. Examples where comparable grab sample results are easily attainable include chlorine residuals, filter turbidity and UV transmittance readings.</p>	<input type="radio"/>	N/A
		<input type="radio"/>	1. Equipment maintenance, calibration or accuracy checks are not being completed.
		<input type="radio"/>	2. Some equipment maintenance, calibration or accuracy checks are being completed but supporting documentation is incomplete.
		<input type="radio"/>	3. Annual equipment maintenance, calibration or accuracy checks (on meters utilized for compliance monitoring) have been completed with supporting documentation available.
		<input checked="" type="radio"/>	4. All monitoring equipment reflects best available technology, maintenance, and calibration is done annually by a qualified person(s), and accuracy checks (i.e. using primary or secondary standards) are performed at minimum on a monthly basis, and all supporting documents are available as verification. Definition: a qualified person is an instrumentation technician, a representative of the manufacturer of the instrument(s) or an operator certified to the level of the waterworks.

Comments:

Hach was out to Carstairs in January 2021 to calibrate the bench top meters used by the operators. (The Town does not have a continuous chlorine analyzer at the pump house.)

Monthly accuracy checks are done by the operator on the bench top meters using gel standards with the results documented.

10	<p>Were treated water sample(s) taken as required, for all listed parameters at the required frequency and location and analyzed by a lab that is accredited to ISO/IEC 17025 standard for the parameters (accrediting bodies are CALA (Canadian Association for Laboratory Accreditation) or Standards Council of Canada)?</p>	<input type="radio"/>	N/A
		<input type="radio"/>	1. Samples were not taken.
		<input type="radio"/>	2. Samples were taken, but did not meet frequency requirements and/or include all parameters.
		<input checked="" type="radio"/>	3. All required samples were taken at the required frequency and analyzed for the required parameters by an appropriately accredited lab. The approval holder reviewed and understood the lab sample results and immediately reported any results which exceed the Maximum Acceptable Concentration values.
		<input type="radio"/>	4. In addition to point 3 all applicable parameters with maximum acceptable concentrations (MAC) and aesthetic objectives (AO) are being trended to show if water quality is changing over time (To show if any of the parameters tested are increasing/decreasing from historical values).

Comments:

THM and lead samples are collected at the frequencies required by the COP. Results for both lead and THM's are trended. The operator had a copy of the most recent sample results from Anthony Henday WTP.

The sample results from Anthony Henday WTP are not trended at this time.

11	Are waste streams that are being released from the water treatment plant meeting the approval requirements?	<input type="radio"/>	N/A
		<input type="radio"/>	1. All Waste streams being released from the water plant do not meet approval requirements.
		<input type="radio"/>	2. Some waste streams being released from the water plant do not meet the approval requirements.
		<input type="radio"/>	3. All waste streams being released from the water plant meet the approval requirements.
		<input checked="" type="radio"/>	4. Waste streams are being recycled/reused in the water plant so that no releases to the environment occur and sanitary sewage is taken to an AEP approved treatment facility
<p>Comments:</p> <p>The only waste streams at the pumphouse are sink wastes which go into the sanitary system.</p>			
12	Are filter(s) effluent turbidity monitoring (entering clearwell reservoir) requirements met?	<input checked="" type="radio"/>	N/A
		<input type="radio"/>	1. No filter effluent turbidity monitoring
		<input type="radio"/>	2. Common header turbidity (continuous/grab) monitoring.
		<input type="radio"/>	3. Individual filter continuous monitoring or meets approval requirements.
		<input type="radio"/>	4. Individual filter continuous turbidity monitoring with data trending, limit alarms and system shutdowns (before the turbidity exceeds the approval limits). Definition: data trending is the recording of continuous analyzer results in a format that enables the operator to look back over time and see the values produced by an analyzer (at a minimum of 5 minute intervals). This verifies that the data produced by the continuous analyzer is valid.
<p>Comments:</p>			
		<input checked="" type="radio"/>	N/A
		<input type="radio"/>	1. Chlorine residual monitoring not conducted.
		<input type="radio"/>	2. Chlorine residual monitoring conducted, but not with adequate frequency.

13	Are treated water chlorine residual monitoring (entering distributon system at the point where CT's have been achieved) Approval/COP requirements met?	<input type="radio"/> 3. Continuous chlorine residual monitoring conducted or meets approval/COP requirements. <input type="radio"/> 4. Continuous chlorine residual monitoring is conducted with data trending, limit alarms and operator call outs when limits are not met. Operators are using the lowest chlorine residual (off the continuous analyzer) for the day to calculate their CT disinfection ratio. Definition: data trending is the recording of continuous analyzer results in a format that enables the operator to look back over time and see the values produced by an analyzer (at a minimum of 5 minute intervals). This verifies that the data produced by the continuous analyzer is valid.
Comments:		
14	Are treated water chlorine residual monitoring (in the distribution system) requirements met?	<input type="radio"/> N/A <input type="radio"/> 1. Chlorine residual monitoring frequency not met. <input type="radio"/> 2. Some distribution system chlorine residual monitoring is conducted, but not at random locations throughout the system. <input type="radio"/> 3. Required approval/Code of Practice (COP) distribution system chlorine residual monitoring conducted at random locations throughout the distribution system. <input checked="" type="radio"/> 4. Additional daily distribution system chlorine residual monitoring is routinely conducted, with excellent representative coverage of the entire system. Definition: additional daily monitoring means that chlorine residuals are monitored, one or more days, per week than what is required by the approval or COP.
Comments: Grab samples are collected by the operators 7 days per week.		
		<input type="radio"/> N/A <input type="radio"/> 1. Bacteriological re-sampling required due to initial sampling error (total coliforms or E. coli present) and operator did not follow the Bac-T Protocol when re-sampling, or poor re-sample techniques were used resulting in additional false positives. <input type="radio"/> 2. Bacteriological re-sampling required due to operator sampling error (total coliforms or E. coli present) but operator followed the Bac-T Protocol. There are ongoing issues with sample management and delivery (i.e. no ice packs included, incorrect labelling, courier issues, etc.).

15	<p>Is the approval/registration holder diligent in ensuring that all bacteriological sampling is done properly - as determined by the Bac-T Protocol and the Environmental Public Health Field Manual for Private, Public and Communal Drinking Water Systems in Alberta?</p>	<div> <input type="radio"/> 3. All bacteriological samples are collected and submitted properly with no repeat samples required as a result of operator sampling errors. If bacteriological re- sampling was required due to the presence of total coliforms or E. coli the operator followed the Bac-T Protocol and no other sample management issues were identified. A Bacteriological Quality Monitoring Plan has been developed as part of the Operations program. </div> <div> <input checked="" type="radio"/> 4. All bacteriological samples are collected and submitted properly with no repeat samples required or samples rejected as a result of sample management issues. The system operator is following the Bacteriological Quality Monitoring Plan as set out in their Operations Program (i.e. where, when and how to sample). </div>
<p>Comments:</p> <p>According to the operators there have been no failed bacteriological samples or samples rejected for labeling errors or late arrivals. The operator had a map of the sampling locations used for bacteria sampling.</p>		
16	<p>Are treated water fluoride concentration limits and monitoring requirements met?</p>	<div> <input checked="" type="radio"/> N/A </div> <div> <input type="radio"/> 1. Fluoride monitoring not conducted and/or unreported Approval/COP (Code of Practice) limit failure occurred. </div> <div> <input type="radio"/> 2. Fluoride monitoring conducted, but not with adequate frequency and/or reported Approval/COP limit failure occurred. </div> <div> <input type="radio"/> 3. Daily fluoride grab monitoring conducted and limits meet requirements of Approval/COP or if a contravention is reported the incident response resolved the issue so that no drinking water safety concerns resulted. </div> <div> <input type="radio"/> 4. In addition to the requirements of (3) above, the Approval/Registration Holder is splitting their samples and submitting (at least on a monthly basis) a fluoride sample to an accredited lab for comparison analysis. </div>
<p>Comments:</p>		
17	<p>Are system water volumes metered?</p>	<div> <input type="radio"/> N/A </div> <div> <input type="radio"/> 1. No metering of water volumes. </div> <div> <input type="radio"/> 2. Facility influent or effluent water volumes metered. </div> <div> <input type="radio"/> 3. Facility influent (from the source) and effluent water volumes metered. </div> <div> <input type="radio"/> 4. Facility influent and effluent water volumes metered, including backwash/filter to waste volumes (or calculate) </div>

		<input checked="" type="radio"/> and a full water distribution system metering program is in place. Water balancing is conducted and a program is in place to address water losses that occur throughout the waterworks system (plan to systematically replace leaking valves, water lines, etc.).
Comments: Water is metered into and out of the pumphouse. All service connections are metered. Water audits (water balancing calculations) are currently conducted by the Town on a monthly basis and losses are found to be consistently under 10%.		
18	Are the chemicals used at the Water Treatment Plant (includes both direct and indirect additives) listed and used as specified by ANSI (American National Standards Institute)/NSF (National Sanitation Foundation) Standard 60 or IISO/IEC 9000 or ISO (International Standards Organization)/IEC 14001?	<input checked="" type="radio"/> N/A <input type="radio"/> 1. Not all of the chemicals used at the facility are listed in the ANSI/NSF Standard and/or the operator is not aware of this requirement. <input type="radio"/> 2. All of the chemicals used at the facility are listed in the ANSI/NSF Standard, but the chemical feed dosage exceeds the dosage specified as the Maximum Use Limit (specified in NSF Standard 60) or the limits set out in a Letter of Authorization (LOA) issued by the Director. <input type="radio"/> 3. All of the chemicals are specified in the ANSI/NSF Standard and the chemical feed dosages do not exceed the dosage specified as the Maximum Use Limit (MUL) or the Letter of Authorization limits. <input type="radio"/> 4. In addition to meeting the requirements of (3) above, all chemicals are stored properly with spills immediately cleaned up, secondary containment in place around the chemical storage area and current SDS records are kept on site. Operator(s) is aware of the Maximum Use Limits for all the chemicals added to the water supply.
Comments: No chlorine is added by the Town.		
19	Have Approval/Code of Practice (COP) and Potable Water Regulation contraventions for the Operational Risk assessment been properly reported? Reportable contraventions from the Operational Risk section may include: incomplete or improper frequency of sampling for all listed parameters required to be analyzed by a third party (accredited) lab; treated water samples do not meet the Guideline for Canadian Drinking Water Quality maximum acceptable concentration limits and were not immediately reported; not meeting fluoride monitoring frequency or limits, and/or water treatment chemicals are not certified (NSF/ISO/as authorized).	<input type="radio"/> N/A <input type="radio"/> 1. Have had unreported contraventions, or operator(s) failed to notice when contraventions occurred that should have been reported. <input type="radio"/> 2. Contraventions are reported but not as required (i.e. no written report(s) submitted, late reports, incomplete reports, or reports sent to the wrong location). <input type="radio"/> 3. Contraventions reported properly with complete and appropriate written follow-up that resulted in the resolution of the issue(s) or no contravention reports were required as the facility was operated to meet Approval/COP requirements. <input checked="" type="radio"/> 4. Addition to the requirements of point 3 above, contraventions are tracked and reviewed to identify any reoccurring incidents or issues in an effort to minimize or prevent future reoccurrences.
Comments: No operational risk contraventions required reporting by the Town.		

OPERATIONAL RISK ASSESSMENT:

PASS

OPERATIONAL RISK ASSESSMENT COMMENTS:

Administrative Risk Assessment Questions

20

Have preventative maintenance measures been established in the distribution system and treated water reservoir(s) to minimize adverse effects to water quality? Preventative maintenance program includes: a protocol that outlines when/how valves are to be exercised (annual exercising is recommended), a protocol for the scouring of water mains by high velocity unidirectional flushing, pigging of water mains or by other means, inspection/cleaning of clearwells/reservoirs, installation/inspection of backflow preventers (AEP Standards require backflow preventers at the entry into the waterworks system or at a truck fill station), a cross connection control program, a protocol for the return to service of a water main that has been repaired or for a newly installed water main.

☐

N/A

☐

1. No scheduled maintenance program (valve exercising, water main flushing, treated water reservoir inspection) for the distribution system and treated water reservoir(s). Backflow preventers or air gaps are not installed on truck fill. No cross connection control program is in place.

☐

2. Distribution system and treated water reservoir maintenance program developed but cannot provide evidence it is being carried out and the system has had water main breaks occur each year resulting in a widespread loss of positive pressure and interruption of key water services.

☐

3. Distribution system and treated water reservoir maintenance program in place with evidence supporting that it is being carried out. Cross connection (connections with a wastewater system, a storm water system or another unapproved waterworks system) control inspection program is in place. Return to service protocol in place for new and repaired water mains and evidence it is being followed.

☒

4. A full preventative maintenance program is in place that includes the requirements of point 3 as well as the completion of the following: a documented unidirectional flushing program, water valves to isolate water lines for repairs are located and exercised to ensure they are operational, documentation of a water main and valve replacement schedule and future life expectancy is completed. The water distribution system infrastructure has the ability to maintain service to the rest of the community, and minimize disruption to consumers, while repairs are conducted on isolated sections (i.e. looped water lines to allow water to be distributed from multiple directions).

Comments:

According to the operators the following PM activities are conducted:

Valve exercising is completed on an annual basis.

Hydrant flushing is being done on an annual basis. With some unidirectional flushing of water mains accomplished (in certain sections of Town).

There is a bulkfill (truckfill) water station in the Town and a backflow preventer is installed.

Most of the water lines are looped and there have not been issues with water line breaks.

The reservoir was last inspected/cleaned in 2019 by Aquatech and it was found to be very clean.

The Town has a cross connection control package that is handed out to contractors and AENV encourages the Town to perform inspections to ensure the rules are followed. No private wells are in use in the Town that they are aware of.

A "return to service protocol for repaired water mains" is in the Operations Program and followed by operators when breaks occur.

☒

N/A

☐

1. Well(s) have never been maintained or inspected.

For systems whose source is ground water from a well - Are

2. Well(s) have no protection measures or maintenance program in place. (protection measure

21	<p>raw water wells being maintained in a sanitary manner? (Examples of actions that support sanitary maintenance of a well include - a well maintenance program is in place, documented regular well maintenance, site inspections, documented protocols/schedules for pump and screen inspection/cleaning)</p>	<p><input type="radio"/> may include: fencing, caplocks installed, well head is accessible for maintenance, well casing vented, casing(s) extend above snowline, water tight caps etc.)</p> <p><input type="radio"/> 3. Well(s) have protection measures in place. (protection measure may include: fencing, caplocks installed, well head is accessible for maintenance, well casing vented, casing(s) extend above snowline, water tight caps etc.)</p> <p><input type="radio"/> 4. Well(s) have protection measures in place and documented preventative maintenance program is in place and being followed.</p>
<p>Comments:</p>		
22	<p>Do the operators demonstrate awareness of applicable legislation as required in the operators' Code of Conduct (Approval or Registration under the Code of Practice, the Potable Water Regulations (PWR) and AEP Standards and Guidelines (Standards))?</p>	<p><input type="radio"/> N/A</p> <p><input type="radio"/> 1. Approval/COP, PWR and Standards not immediately available and operator cannot demonstrate awareness of requirements.</p> <p><input type="radio"/> 2. Approval/COP, PWR and Standards are available, however operator is not aware of the requirements.</p> <p><input type="radio"/> 3. Approval/COP, PWR and Standards documents were available at the time of inspection and the operator is aware and following the requirements.</p> <p><input checked="" type="radio"/> 4. Approval/COP, PWR and Standards were available at the time of inspection and all operators are aware of and following the requirements. All operators have completed a review of the Approval/COP and have signed off on the review.</p>
<p>Comments:</p> <p>The operator interviewed demonstrated a very good level of knowledge. On had were copies of the Code of Practice (COP), Potable Water Regulations and health Canada Guidelines for drinking water quality. AENV was informed that operators review the content of these documents.</p>		
23	<p>Were reports (monthly and annual) properly compiled and submitted on time?</p>	<p><input type="radio"/> N/A</p> <p><input type="radio"/> 1. No reports and no records are available.</p> <p><input type="radio"/> 2. Reports and records retained, but do not include all required information; either the monthly or annual report was incomplete. Required monthly e-reporting not completed.</p> <p><input type="radio"/> 3. Complete reports were properly and accurately compiled, retained and available or submitted as required. This includes the electronic submission of annual reports to the correct district address as specified by the AEP Report Submission Guidelines and if applicable monthly data is being submitted electronically to the AEP drinking water quality website.</p>

4. In addition to all the requirements of (3) above, the annual report includes: a cover page, the name and approval/registration number of the waterworks facility, a list of all the operators currently working (or had worked) at the waterworks in that year, the date the Annual report was submitted to AEP, the date(s) of when the DWSP was updated and the signature of person in charge of the waterworks system.

Comments:

The 2020 annual report was reviewed for the inspection. It was submitted to AENV in January 2021.

The annual report included:

Water quality and quantity results,
Bacteriological test results,
Results of equipment calibrations and accuracy checks,
Annual THM and lead test results,
Summary of operational issues,
Date that the DWSP was updated,
Certificates for the certified operators,
Signature of the manager of operational Services.

The operators also stated that electronic reporting is completed.

24 Is the Operations Program completed as per the Approval/Code of Practice

☐ N/A

☐ 1. The operations program has not been started.

☐ 2. The operations program has been started but is not complete.

☐ 3. The operations program is completed and readily available for AEP to review.

☒ 4. The operations program is completed, being followed, reviewed annually and signed off by all staff involved in the operation of the waterworks system.

Comments:

The Operations Program was presented to AENV at the time of the inspection. It contained the information listed in Schedule 1 of the COP. The OP had been signed by the operators involved.

25

Is the Drinking Water Safety Plan completed as per the Approval/Code of Practice (COP)? Completed means in accordance with the requirements in the Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems; Part 1 Standards for Municipal Waterworks (2012), as amended. It also means that the completed Drinking Water Safety Plan has been presented to and reviewed by the person(s) responsible for the operation of the waterworks system (this could include the CAO, mayor, reeve, council, system owner, condo board, president of the water co-op, etc.)

☐ N/A

☐ 1. The Drinking Water Safety Plan has not been started.

☐ 2. The Drinking Water Safety Plan has been started but is not complete.

☐ 3. The Drinking Water Safety Plan has been completed, is updated as required by the authorization, and is readily available for AEP to review.

☒ 4. Drinking Water Safety Plan has been completed, reviewed annually, and signed off by all staff involved with the waterworks system. Actions have been taken

to address one or more key risks that have been identified (if applicable).

Comments:

The Drinking Water Safety Plan (DWSP) is completed and was reviewed in March of 2020. no key risks were identified. The document was also signed by the operators.

26 For Approvals with upgrading requirements only - Has the approval holder completed the upgrade, or portions of the upgrade, in accordance with the approval, and met the deadlines set out by the approval?

- ☒ N/A
- ☐ 1. Approval holder has not started the upgrade at all.
- ☐ 2. Approval holder has started the upgrade but has not completed it and has not received authorization for an extension from AEP.
- ☐ 3. Approval holder has completed the upgrade (including commissioning) prior to the deadline set out by the approval, or has not completed the upgrade but has received written authorization for an extension of completion date.
- ☐ 4. Approval holder has completed the upgrade, and the upgraded portions are running as part of the plant and has been included in the OP and DWSP.

Comments:

27 Have Approval/Code of Practice (COP) and Potable Water Regulation contraventions for the Administrative Risk assessment been properly reported? Reportable contraventions from the Administrative Risk section may include: late/missing reports (monthly/annually); a missing/incomplete Operations Program; a missing/incomplete Drinking Water Safety Plan.

- ☐ N/A
- ☐ 1. Have had unreported contraventions, or operator(s) failed to notice when contraventions occurred that should have been reported.
- ☐ 2. Contraventions are reported but not as required (i.e. no written report(s) submitted, late reports, incomplete reports, or reports sent to the wrong location).
- ☐ 3. Contraventions reported properly with complete and appropriate written follow-up that resulted in the resolution of the issue(s) or no contravention reports were required as the facility was operated to meet Approval/COP requirements.
- ☒ 4. In addition to the requirements of point 3 above, contraventions are tracked and reviewed to identify any reoccurring incidents or issues in an effort to minimize or prevent future reoccurrences.

Comments:

No administrative risk contraventions required reporting to AENV.

ADMINISTRATIVE RISK ASSESSMENT:

PASS

ADMINISTRATIVE RISK ASSESSMENT COMMENTS:

