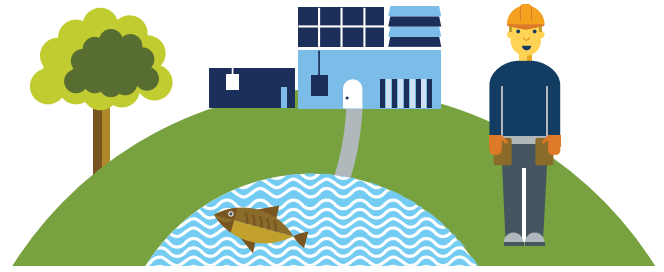




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TOWN OF STRATHMORE PERFORMANCE HIGHLIGHTS – 2010

BACKGROUND

The Town of Strathmore (population 12,000) has a 20-year contract with EPCOR to maintain the Town's water and wastewater infrastructure, including a reservoir, sanitary lift stations, and the water distribution and wastewater collection system, as well as water meter installations. Strathmore's drinking water is now piped from Calgary. The Town assets include:

- State-of-the-art tertiary level wastewater treatment plant upgraded this year to biological nutrient removal (BNR) system
- The wastewater collection system consists of six wastewater lift stations
- The storm water system includes three lift stations and eight outfalls that discharge to a series of storm water retention ponds. The storm water then flows via a watercourse to Eagle Lake

Highlights

- Began Phase I of wastewater treatment plant upgrade to a BNR system
- Completed significant upgrades to Brentwood reservoir
- New Regional Water Line to Calgary operational and EPCOR helps ensure quality and consistency of water supply within the Town

Challenges

- Maintaining consistent effluent quality during commissioning of wastewater treatment plant upgrade
- Optimizing the timing and control of sodium hypochlorite disinfection feed rates on the East Calgary Regional Water Line
- Identifying the source of several customer complaints regarding the smell of sewer gas



Brentwood Reservoir

QUALITY HIGHLIGHTS

EPCOR completed water quality and wastewater tests in compliance with its Licence to Operate requirements. All tests are completed by Strathmore operations staff with Quality Assurance support from the EPCOR Water Laboratory in Edmonton.

A key to ensuring good water quality is to effectively maintain and monitor the local distribution and collection systems.

- EPCOR staff collected 181 samples from the water distribution system for bacteriological examination by the Provincial Lab. All sample results showed the absence of Total Coliforms and *E. Coli*
- Staff also conducted nearly 2000 tests for chlorine, turbidity and temperature. The results consistently met all Alberta Environment (AENV) regulatory requirements for operation of a water system

Violations

EPCOR reported no violations regarding the water distribution system in 2010.

Wastewater

- Five parameters tested daily during times of effluent discharge from the wastewater facility
- 11 parameters sampled daily for plant operations

Violations

EPCOR reported four regulatory violations in 2010: two administrative and two minor spills at wastewater treatment plant.

ENVIRONMENT HIGHLIGHTS

EPCOR works in cooperation with local, provincial and federal environmental agencies to ensure all regulatory and environmental requirements are met or exceeded.

- EPCOR identified the Kinsmen Lake storm water outfall as the source of several complaints regarding the smell of sewer gas. EPCOR and the Town of Strathmore issued a notice to residents about the hydrogen sulphide odors
- Submitted all monthly and annual reports to the Town and Alberta Environment

Water Quality Results in Distribution System*

PARAMETER	STANDARD	ANNUAL RESULT (AVG)	SUCCESS?
Trihalomethane (4 sites combined)	80.0 ug/L	21.0 ug/L	Yes
Free Chlorine in Brentwood zone	0.10 mg/L Min	0.97 mg/L	Yes
Free Chlorine in Westmount zone	0.10 mg/L Min	0.96 mg/L	Yes
Turbidity in Brentwood zone	1 NTU Max	0.18 NTU	Yes
Turbidity in Westmount zone	1 NTU Max	0.26 NTU	Yes

Wastewater Effluent Quality Results*

PARAMETER	STANDARD	ANNUAL RESULT (AVG)	SUCCESS?
Total Suspended Solids	20 mg/L Max	6.6 mg/L	Yes
Carbonaceous Biological Oxygen Demand	20 mg/L Max	4.0 mg/L	Yes
Ammonia	5 10 mg/L Max	2.9 mg/L	Yes
Phosphorus	1 mg/L Max	0.51 mg/L	Yes

*More details are available in the Strathmore's 2010 Annual Waterworks Report to Alberta Environment.

OPERATIONAL EXCELLENCE HIGHLIGHTS

EPCOR proactively manages all infrastructure through regular maintenance, evaluations and improvements.

- Optimized the timing and control of sodium hypochlorite feed rates on the East Calgary Water Line. EPCOR Operators received 50 after hour call-outs related to faults/failures of the sodium hypochlorite feed system. These issues were addressed successfully with programming and operational changes completed in November 2010
- Completed preventative maintenance inspections on:
 - 13 sanitary lift stations daily
 - 190 fire hydrants twice a year
 - 14 generators inspected twice a year
 - 609 man holes annually
 - 413 water valves annually
- After hour call-outs to perform work:
 - Water distribution – 40
 - Sanitary sewer – 63
 - Miscellaneous – 0



Strathmore WWTP SBR Plant during decommissioning

CAPITAL PROJECT HIGHLIGHTS

EPCOR expertise in managing utilities provides the Town with savings by delivering infrastructure projects at or below budget. EPCOR manages the capital costs in an innovative manner that minimizes risk to the Town.

Brentwood Water Reservoir project included: upgrading two of the three existing 57 L/Second capacity pumps to 127 L/Second capacity, installation of a new discharge header and Pressure Relief Valve, programming of a logic controller, and relocating an emergency backup generator to the reservoir from the out-of-service water treatment plant.



Strathmore WWTP Storage Lagoons

SAFETY HIGHLIGHTS

EPCOR is committed to the ongoing safety of our employees with the promotion of safe work practices incorporated into regular work activities, and regular inspections conducted in all work areas. Lost-time incidents are reported monthly and a target of zero is set annually.

- Attained no lost-time injuries
- Four operators attended Global 2000 safety training
- Created 55 safe work plans
- Conducted monthly safety meetings and ongoing safety training

PEOPLE HIGHLIGHTS

Certified EPCOR staff provides 24-hour emergency services, is available to answer customer questions, and is committed to resolving customer concerns in a timely manner.

Customer Inquiries

- Water Distribution – 62
- Curb Stop – 39
- Sanitary sewer – 31
- Residential Irrigation – 9
- Hydrant – 4
- Miscellaneous – 9

Staffing

- Eleven EPCOR staff maintain and operate the Town's water and wastewater infrastructure
- Six operators have Alberta Environment's accreditation, ranging from Level I to Level III training

Community Investment

EPCOR is proud to actively support the community, and we strive to build sustainable partnerships that enhance community life and promote wellness. This year we sponsored the Strathmore Fire Department's Canada Day Breakfast.

LOOKING AHEAD

- Finalize commissioning of wastewater treatment plant upgrades
- Complete commissioning of new treated effluent line to main stem of Bow River
- Supply treated effluent to new privately-owned effluent irrigation system
- Potential repairs to existing drinking water reservoir
- Potential construction of an additional water reservoir



EPCOR sponsoring the July 1st Pancake Breakfast hosted by the Fire Department



EPCOR's emergency response equipment mobilized at the Brentwood Reservoir



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epcor.ca