

# Alberta Newsprint Company

## EnviroVista Progress Report

### March 2017

As part of the EnviroVista Champion status, the Alberta Newsprint Company (ANC) has committed to reporting on and making public the progress made and planned as per our EnviroVista Champion Commitments under the Champion Level Stewardship Agreement dated June 4<sup>th</sup>, 2008.

The following is progress on the EnviroVista Champion Commitments as per Schedule A of the Stewardship Agreement (attached).

- (a)
- (i) ANC continues to participate in activities related to the intent of the Alberta Pulp and Paper Working Group. ANC has been in the forefront in trying to re-establishing the working group as a functional entity. In 2016 the Upper Athabasca River Pulp and Paper Water Quality Committee was re-established and conducted two meetings under the leadership of Alberta Environment and Parks.
  - (ii) In 2015, ANC participated through active representation on the Athabasca Watershed Planning and Advisory Council as an elected member of the Board of Directors. In 2016 ANC focused efforts on participation on the Communications and Community Engagement Committee.

ANC helped lead the second update to the forestry sector Conservation Efficiency and Productivity(CEP) Plan for water use reduction as per the Alberta Water Council document; [Recommendations for Water Conservation, Efficiency and Productivity Sector Planning](#) September 2008. The CEP plan update was completed in March of 2012. The Forestry Sector was the first to provide an update. ANC led the second update in 2015 and continued in 2016 of the CEP review team.

CEP Plan

<http://www.albertawatercouncil.ca/LinkClick.aspx?fileticket=Rdq39wTw4pQ%3d&tabid=209>

CEP Plan Update – March 2012

<http://www.albertawatercouncil.ca/LinkClick.aspx?fileticket=w3iPPdgMOuI%3d&tabid=209>

(iii) Local Community Support

In 2016, ANC allocated **\$10,700** (*donations/advertising/merchandise*) towards the following local initiatives and non-profit organizations:

**Donations**

MS Society Bike Tour	Special Olympics
Mayerthorpe Rodeo	Camp He Ho Ha
Bikers against child abuse	Alzheimer's Society
Community Lunch Box Program	Kidsport
Whitecourt Fish and Game	SCARS society
St. Joseph Rugby team	Percy Baxter school –Oiler alumni ticket donation
MADD	Royal Canadian Legion (poppy drive)
Pumpjack Players -fall production	University Hospital Foundation
Hilltop High School COOL program	Stollery Children's Foundation
Wellspring Crisis Center	Mayerthorps Cool Camp
Mayerthorpe High School – Breakfast Program	

**Advertising**

SOS Children's Safety Magazine	Green Planet for Kids
The Children's Book of Celebration	Whitecourt Star Annual Donation Ad
Community Safety Net – fire safety	Whitecourt Star (Christmas Songbook)
Elementary Safety Book for Children	Teenage Survival Handbook
WOR Review (Nat'l Wall of Remembrance Assoc.)	Community Drug Alert (SMRT)
Drug facts for Young People	Enviro Kids Guide
Hospital Activity Book for Children	Remembrance Day Advertising (Wct. Star)
Police Advocate Journal (Bullying Program)	96.7 The Rig (don't drink and drive)
Whitecourt Star – Fire Prevention Week	Whitecourt Press – Fire Prevention Week
Fire Prevention B.C.	

**Merchandise**

Whitecourt Trail Blazers 2016 Annual Rally

ANC is strongly committed to the support of local organizations, and to the reduction and minimization of waste. ANC has been able to combine both of these efforts by collecting/recycling beverage containers and donating all the proceeds. In 2016, ANC collected and distributed **\$1797.55** to the following organizations:

Whitecourt Girl Guides	St Joseph Boys Basketball Team
Alley Cats Fundraiser	Whitecourt Wado Kai Karate Club
Whitecourt District Preschool	

### Christmas Donations

During each holiday season, the owner of ANC has personally donated funds to those in need. In 2016, our owner distributed a total of **\$20,000** to the following organizations:

Wellspring Family Resource and Crisis Centre  
Whitecourt Christmas Hamper Fund  
Tennille's Hope Soup Kitchen

Whitecourt Food Bank  
Lorne's Blanket (homeless shelter)

(iv)

- A. ANC continues to be an active member of the Whitecourt Chamber of Commerce.
- B. ANC continues as a regular participant of the Regional Forestry Advisory Committee.
- C. ANC continues to support a mutual aid agreement in conjunction with the Town of Whitecourt and is a Member of the Whitecourt FireSmart Planning committee.

(b)

- (i) ANC is currently certified under the AFPA Forest Care Program. ANC was audited by an external consultant and obtained re-certification in December 2014.

(c)

- (i) ANC was one of the developing partners in the creation of the Standards and Guidelines for the Land Application of Mechanical Pulp Mill Sludge to Agricultural Land, AENV, February 1999, as amended. <http://environment.gov.ab.ca/info/library/7267.pdf>

ANC is committed to ensuring that all sludge is land applied in an environmentally sound manner.

- (ii) ANC strives to ensure compliance of landowners utilizing the sludge by having the landowner complete a Sludge User Package. Information required in the package also includes confirmation from the landowner that they have read and understood the proper use of the material in conformance with the Standards and Guidelines for the Land Application of Mechanical Pulp Mill Sludge to Agricultural Land, AENV, February 1999, as amended.

(iii)

A. ANC continues to conduct research with Alberta Innovates Technology Futures and other mechanical mills for uses in well site reclamation and remediation. For information regarding sludge research visit

<http://www.smartsludge.com/>

B. During 2015, ANC continued joint research with Alberta Innovates Technology Futures to look at alternate uses for sludge with a focus on the reclamation and remediation market.

In 2016 ANC continued participation in a research project led by VINELAND Research looking at means to improve survival of vegetation planted along transportation corridors. ANC provided composted sludge material to three sites, Edmonton, Calgary and Airdrie. The VINELAND Research and Innovation Centre has partnered with Alberta infrastructure as well as the Cities of Calgary and Edmonton as part of this research.

C. Odour from the sludge is best controlled by the landowner immediately incorporating the sludge after spreading. ANC encourages landowners in this practice.

D. Moisture content of the sludge has a great impact on hauling costs. In 2016, ANC continued to investigate technologies and process optimization opportunities to decrease moisture content in sludge produced. New rotary press technology has been identified that may assist in improving dewatering of secondary sludge.

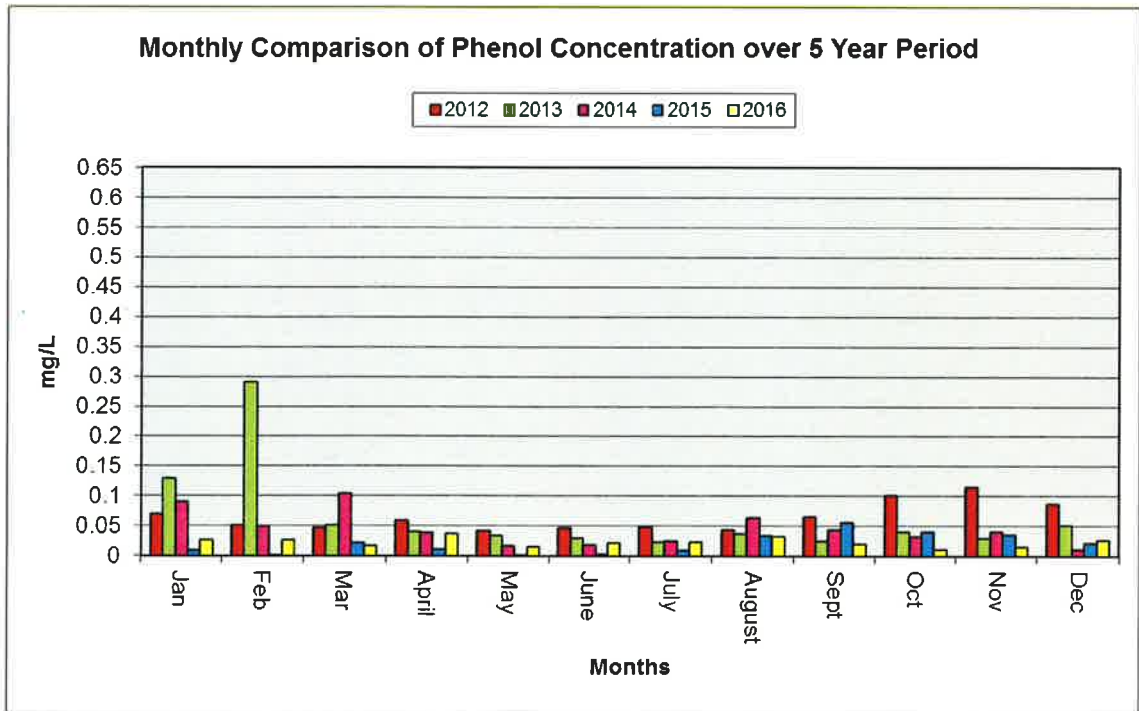
(d)

(i) ANC continues to develop better control methodologies and practices to improve mill performance. BOD: N: P ratio analyses, as well as oxygen consumption are lead indicators to optimize nutrient addition. This approach allows daily, real time, consideration to be given to determine nutrient loading requirements and system wasting rates. The utilization of this approach aided ANC in achieving another excellent year in terms of TSS and BOD and phosphorous discharges. **Overall ANC ranks 2016 as its best year ever for phosphorus discharges!!**

In 2016 ANC achieved an overall reduction of GHG emissions of about **30%** over 2000 for the direct newsprint manufacture operations.

Water usage at ANC is an area of focus with usage in 2016 being higher than the previous year. This is due to new grade development of high bright grades which in trial runs more purging was required. Please see water usage graph below for details. ANC is committed to the CEP Plan and will continue to lead this process with the forest products industry in Alberta. ANC also represented the Alberta Forestry Sector on the Alberta Water Council CEP project review team in 2016.

(ii) Over the past five years, the effluent phenol discharges have continued to decrease. Our 2016 annual average phenol discharge of 0.023 mg/L, is our second lowest result ever achieved!



(iii) ANC is currently in the process of updating the Best Management Practices Plan (BMP) to include items A to J by May 1, 2017.

(iv) NA

(v) Annual reviews of the BMP are being conducted.

- (vi) Green Procurement –ANC purchases many of the wood chips required for the newsprint operation from FMA holders with certified operations. Certification programs such as CSA, ISO, SFI and PEFC are recognized. This contributes to the ANC PEFC (Programme for the Endorsement of Forest Certification Standard) certification.

Clay and starch was used in newsprint production in 2016 for strength and quality reasons. However, the use of these materials reduces the reliance on wood fibre needs.

Batches of acetic acid have been added to the dye day tanks starting in 2016. This procedure helps maintain filter cleanliness and thereby reduces the filter cleaning frequency which reduces sewerage of dye to the effluent system.

ANC began purchasing dye tote disposal services that do not require the rinsing of totes which results in a reduction of dye being seweraged and water used for rinsing.

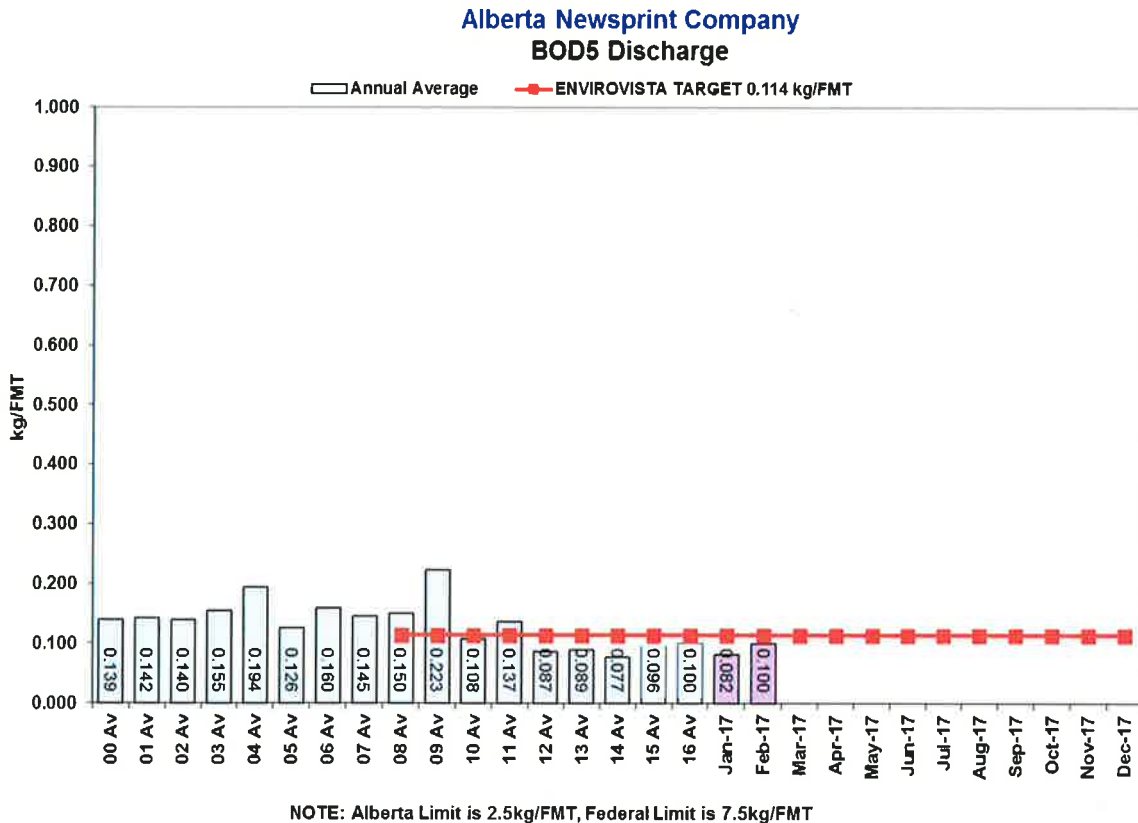
- (vii) Reviews of the storage and handling practices for chemicals used in the mill was conducted in 2016. Pipe and tank labeling in various areas of the mill has been completed with updated labels continues. This work will continue in 2017. Training procedures and hazard assessments for handling and storing chemicals are reviewed on a regular basis.
- (viii) Ongoing environmental training continues to be an important aspect at ANC to ensure that all operations continue to be successful. In 2016, Marshall Environmental Training and Consulting Group (METC) evaluates effluent performance on a quarterly basis. This information is shared with operations staff to help them better understand the process. Weekly effluent system meetings continue to help educate and train all employees involved in operation of the effluent system. Environmental staff also attended various environmental themed conferences and workshops in 2016.
- (ix) Meetings with AEP staff on a variety of issues and projects occurred throughout 2016 which assists AEP staff through providing knowledge of ANC operations.

ANC strives to reduce emission levels and continually improve each year. **In 2016, ANC achieved 3 of 5 EnviroVista Champion internal performance targets!** ANC achieved our lowest phosphorus discharges ever. This was accomplished while maintaining excellent BOD and TSS treatment and reducing nutrient addition.

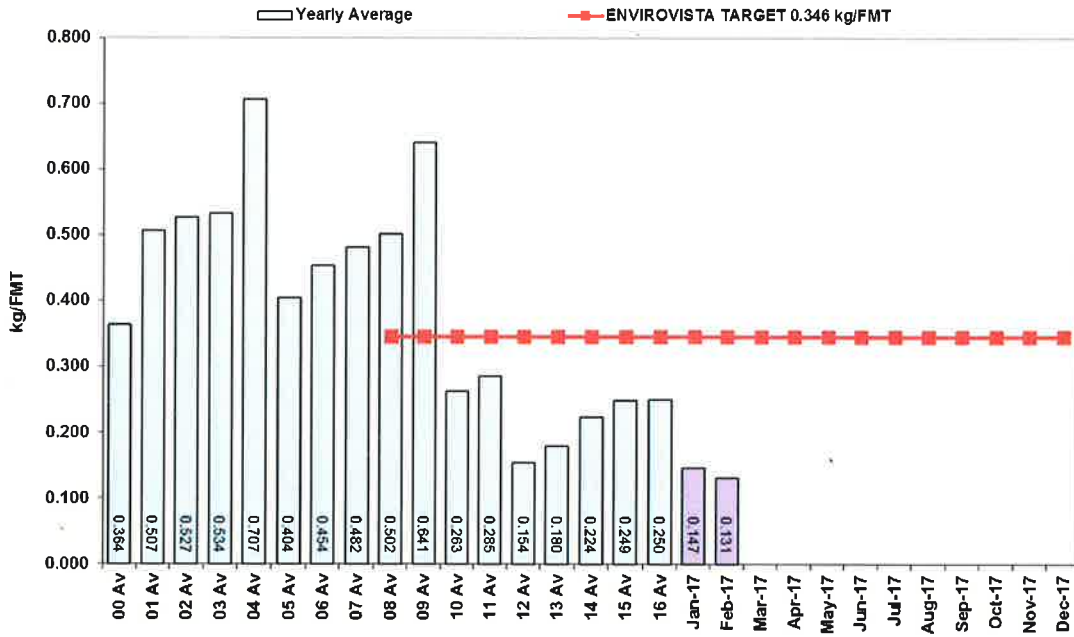
(e)

- i. **B.O.D** - 0.114 kg/FMT - **Achieved 0.100 kg/FMT!**
- ii. **T.S.S** – 0.346 kg/FMT - **Achieved 0.250 kg/FMT!**
- iii. **WATER USAGE** - 22.4 m3/FMT – **Achieved 25.2 m3/FMT.**
- iv. **SEWER LOSSES** - 3.4 % - **Achieved 3.89 %**
- v. **PHOSPHORUS** - 10.5 kg/day – **Achieved 8.58 kg/day!**

The following graphs depict these internal performance targets and display both our past and present performance achievements regarding these parameters.

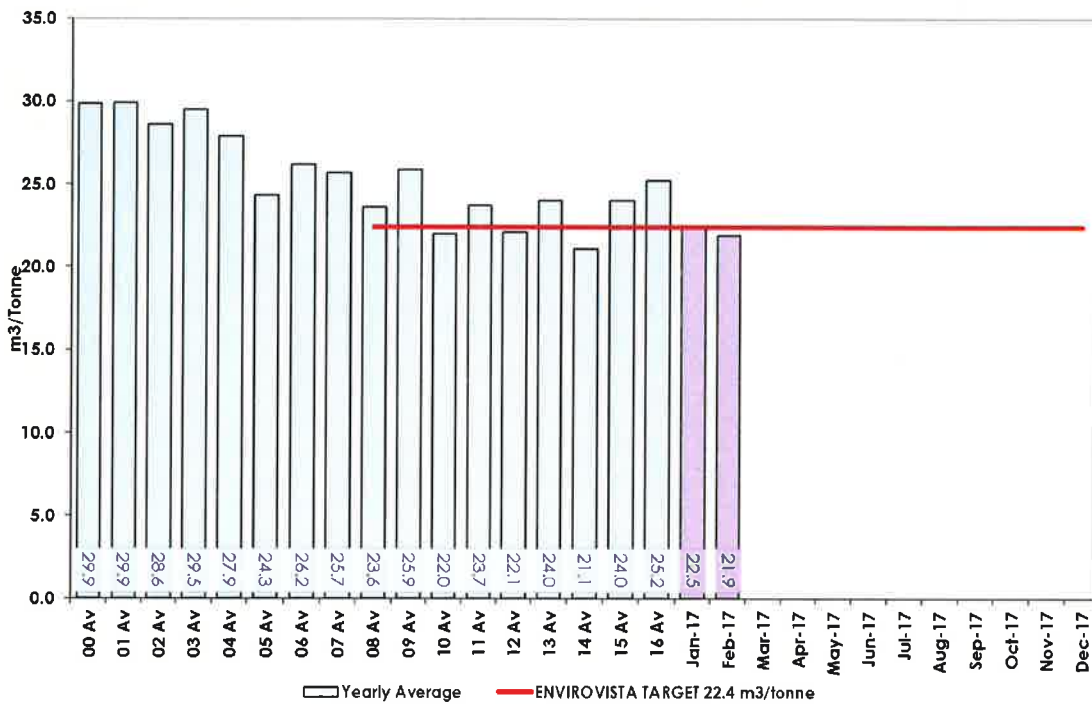


### Alberta Newsprint Company TSS Discharge



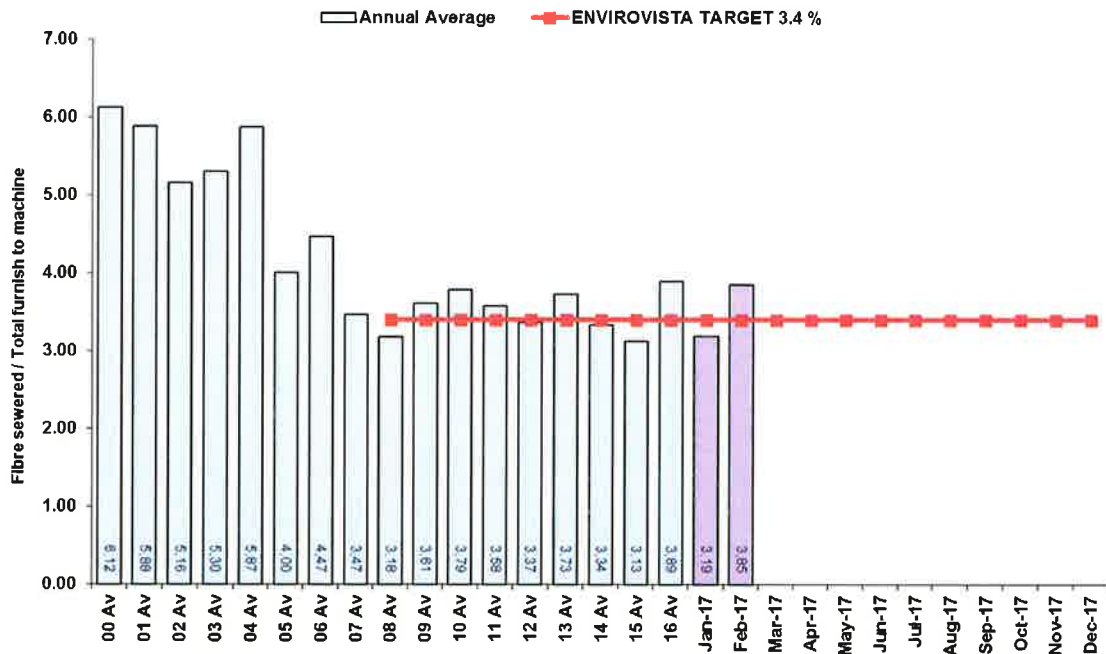
NOTE: Alberta Limit is 4kg/FMT, Federal Limit is 11.25kg/FMT

### Alberta Newsprint Company Water Usage - cubic meters of water per finished metric tonne of paper

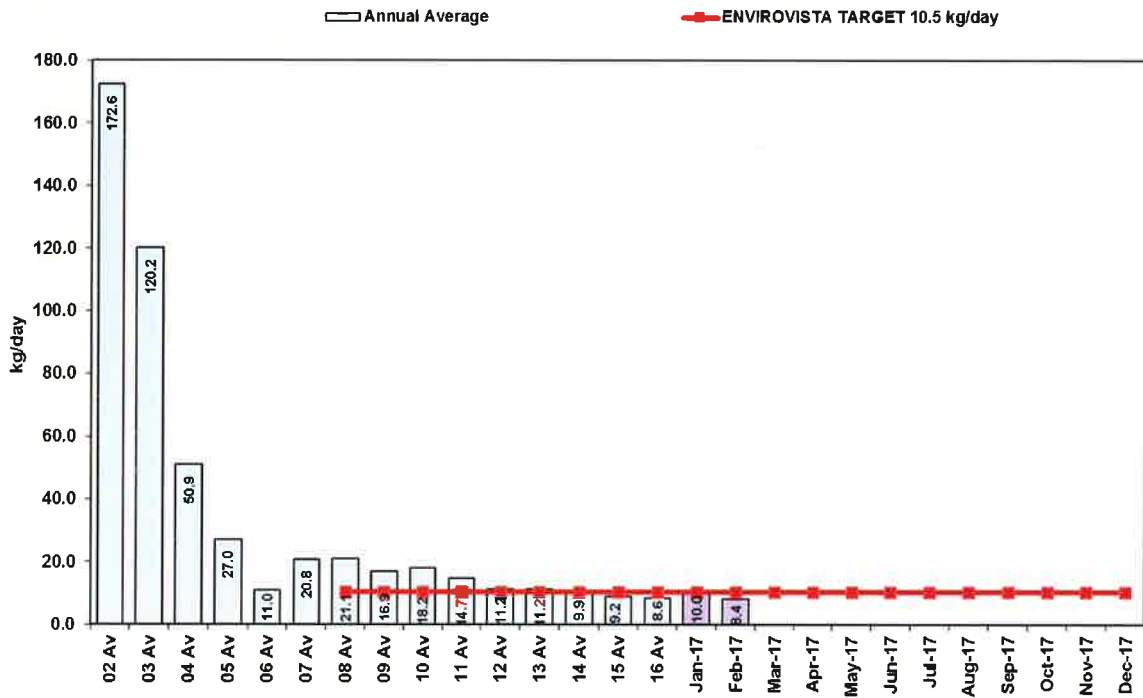


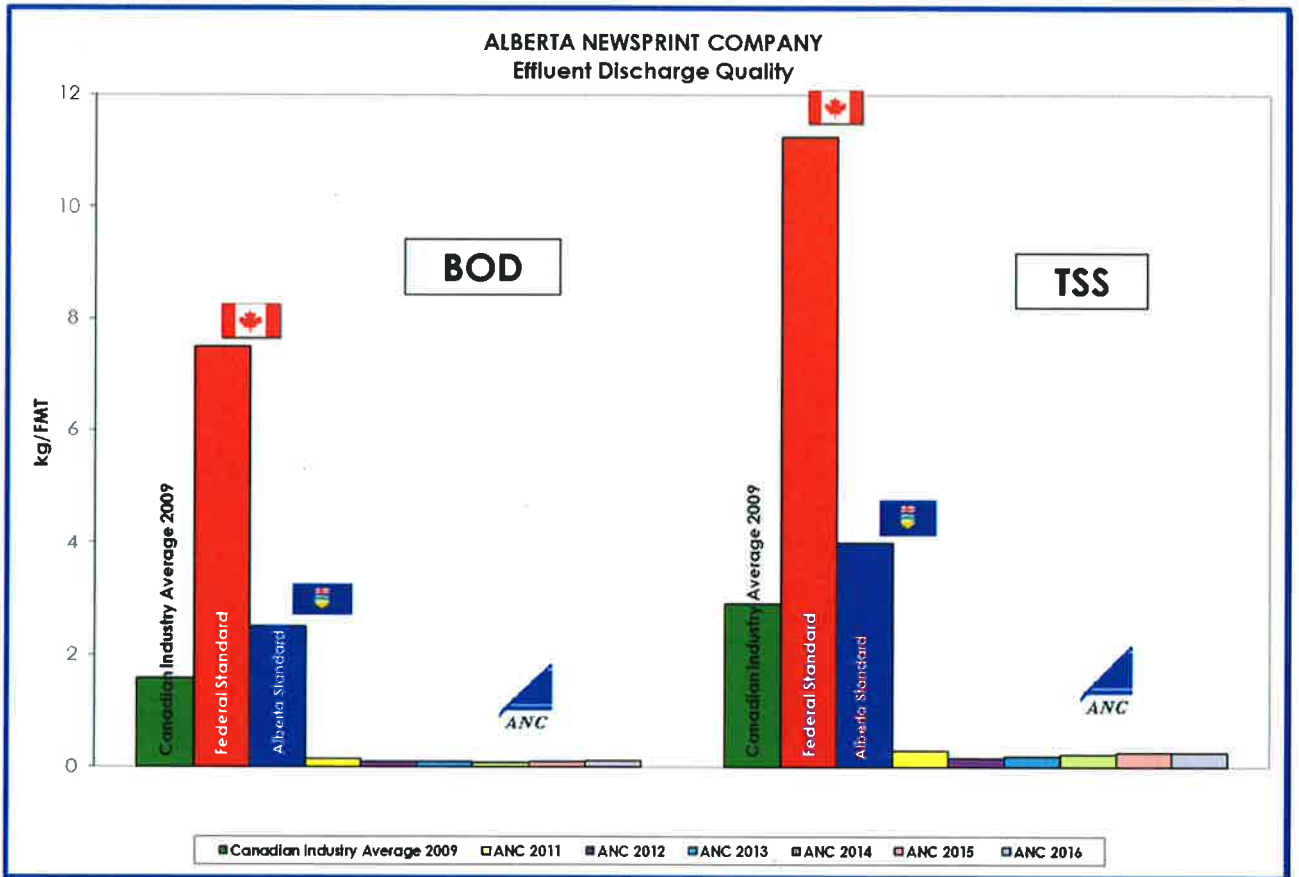


### Alberta Newsprint Company Sewer Loss



### Alberta Newsprint Company Phosphorus Discharge





ANC's external web site is located at [www.albertanewsprint.com](http://www.albertanewsprint.com). Included on this web site is information regarding the environmental program and activities at ANC.

(f) This progress report fulfills this commitment.

## **Notable achievements**

### **Research in Collaboration with AITF**

ANC prepared the mill for utilization of inferior insect attacked fiber through on line chip instrument characterization of blue stain content, chip moisture, and wood species interfacing with pulping process control. In addition, we installed a specially designed shoe press to promote paper strength. ANC installed the first dispersed air flotation clarifier to selectively remove pitch and dark fines from water streams to allow higher use of green and beetle attacked pine. ANC was recognized as a finalist in the November 2010 ASTech awards for research.

### **Environment (Core Value)**

- 2011, 2012, 2013, 2014, 2015 & 2016 ANC achieved SFI/PEFC Chain of Custody for the mill site and Woodlands SFI Certification for our own Forest Management Agreement Area.
- ANC Woodlands in 2011, 2012, 2013, 2014, 2015 & 2016 achieved renewal of ISO 14,001 Environmental Management System Certification
- Achieved 2008 thru 2016- ANC only one of four companies in Alberta to be awarded EnviroVista Champion Level from the Alberta Government for Excellence in Environmental Performance.
- Continuously ranked in top 3 mills of Canada for BOD and TSS (liquid effluent discharge quality)
- Forest Care Mill Re-Certification Achieved in 2014
- Implemented ground breaking Mountain Pine Beetle control plans now used across the Province to sustain forest health
- 1998 Emerald Award for Company Environmental Performance for Large Business Category and 2012 Emerald Award for Shared Foot Prints Regional Plan in the Little Smoky (caribou)
- No environmental regulatory incidents for over 15 years on our Forest Management Area or at the mill.
- Exceptional reforestation success for over 25 years with standards consistently met or surpassed
- Conservation of key Caribou areas
- Planted 50 Millionth Tree

### **Quality (Core Value)**

- 2003 Dow Jones Wall Street Journal Silver Award
- 2005 Dow Jones Wall Street Journal Silver Award
- 2006 Dow Jones Wall Street Journal Gold Award
- 2007 Dow Jones Wall Street Journal Gold Award
  
- 2006 IFRA International Newspaper Color Quality Club -Daily Herald Paddock
  
- 2003 Page Newsprint Supplier Award for Quality and Service
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- 2002 Newsprint Supplier Excellence Award Knight Ridder
- 2004 Newsprint Supplier Excellence Award Knight Ridder
  
- 1992 Newsprint Supplier of the Year Award Gannett (includes Quality Award)
- 1996 Newsprint Supplier of the Year Award Gannett (includes Quality Award)
- 1998 Newsprint Quality Award Gannett
- 1999 Newsprint Quality Award Gannett
- 2000 Newsprint Supplier Award Gannett (includes Quality Award)
- 2001 Newsprint Quality Award Gannett
- 2002 Newsprint Quality Award Gannett
- 2007 Newsprint Supplier of the Year Award Gannett
- 2009 Newsprint Supplier of the Year Award Gannett
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- 2012 Newsprint Quality Award Gannett
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- 2014 Newsprint Supplier of the Year Award Gannett (includes Quality Award)
  
- 2004 & 2005- Inland Press Association Print Quality Award won on ANC paper both years- 2005- The Calgary Herald, 2004 for the Cedar Rapids Gazette (Iowa)
  
- 1999 Awards of Distinction in Export and Manufacturing from Alberta Chambers of Commerce
  
- ANC Customer Survey 2015 – ANC ranked #1 in 97% of our newsprint customer responses

#### **Safety and Wellness Awards (Core Value)**

- Alberta Workplace Health Leader from Alberta Health Services, Workplace Health Improvement Program and AFPA for COR Optional Health Element Pilot Project. Young medical students connecting with ANC workers.
- 2012 to 2014 Outstanding Achievement in Health and Safety for the Pulp and Paper Sector AFPA & Gov't of Alberta
- 2012 Health and Safety Excellence Award Pulp and Paper Sector- AFPA & Alberta Human Services.
- 2010 to 2012 Outstanding Achievement in Health and Safety Pulp and Paper Sector- AFPA & Alberta Human Services
- 2007 Excellence in Health and Safety (1 Year) -Pulp & Paper Sector – AFPA & Alberta Human Resources and Employment
- 2006 Premier's Award for Healthy Workplace Award of Distinction for Medium Size Workplace
- 2004 Work Safe Alberta Best Safety Performer Award
- 1999-2003 Continued Excellence in Health and Safety (5 year)

### **Production (Core Value)**

- In 2010 thru 2014 ANC ranked #1 in North America for newsprint productivity per unit width for a single winder newsprint machine.
- ANC set a production record in April 2010 of 847.2 finished metric tonnes/day adjusted to 48.8 (1,530 meters/min & 94.37 % absolute efficiency).

### **Energy Conservation:**

- ANC has a cross functional “Energy Conservation Team” since 2001
- Energy Conservation Awards won by ANC
  - 2011 & 2010 – 1<sup>st</sup> Prize given by PAPTAC (Pulp & Paper Technical Association of Canada)
  - 2009 – 2<sup>nd</sup> Prize by PAPTAC
  - 2009 – National Energy Conservation Award given by Natural Resources Canada
  - 2008 – 1<sup>st</sup> Prize by PAPTAC
  - 2003 – 3<sup>rd</sup> Prize by PAPTAC
- ANC has reduced its natural gas usage by 60% since 2001 resulted in a reduction of 50,000 tonnes of GHG emission annually
- ANC has eliminated 8,000 HP (equivalent 6,500 home) from the process since 2008
- Natural Resources Canada has published an article on ANC energy conservation on their website under “Canadian Industry Program for Energy Conservation”
- ANC has been invited to speak on various energy forums.
- 2016 was the best year for Gas consumption. 2 Energy savings projects: Pin chip recovery and Auto back flush of the Pressate heat exchanger in TMP contributed to achieve this performance as well as the two months and a half of Effluent recovery.
- 2015 was the second best year for power consumption.

### **Community:**

- Program to buy local
- Ongoing support for local community organizations, facilities, and activities
- No layoffs or downtime
- Premier’s Business Award of Excellence 2014 from Growth Alberta
- Alberta Innovation and Advanced Education recognized ANC as the 2012 and 2013 Employer of the Year for Alberta’s Northern Region for participation in Apprenticeship Training!

For further information please contact ANC at 1-780-778-7000 or visit us at [www.albertanewsprint.com](http://www.albertanewsprint.com).

## **Schedule A – EnviroVista Champion Commitments**

ANC commits to meeting the following EnviroVista Commitments:

- (a) The following, at a minimum, with respect to public involvement and consultation:
  - (i) Participating as a stakeholder in the Alberta Pulp and Paper Working Group. Participation means but is not limited to: providing financial support, in-kind support, scientific guidance, and general input to Alberta Environment in cooperation with other pulp mills in Alberta;
  - (ii) Participation in Alberta Water for Life activities where applicable including participation in Athabasca Watershed Planning and Advisory Council;
  - (iii) Support the local community through donations or in-kind support of local initiatives or non-profit organizations; and
  - (iv) Continuing to be an active member of:
    - A. Whitecourt Chamber of Commerce;
    - B. Regional Forestry Advisory Committee; and
    - C. Mutual Aid Agreement with the Town of Whitecourt;
- (b) Maintain an Environmental Management System that is recognized by Alberta Environment:
  - (i) Certification in the Alberta Forest Products Association ForestCare Program; or
  - (ii) An equivalent recognized Environmental Management System;
- (c) The following, at a minimum, with respect to the land application of pulp mill sludge:
  - (i) For agricultural land, ensure that the land application of pulp mill sludge is in accordance with the Standards and Guidelines for Land Application of Mechanical Pulp Mill Sludge to Agricultural Land, AENV, February 1999, as amended;
  - (ii) Ensure that the land owners comply with the standards and guidelines under subclause (c)(i) above, to prevent any negative environmental impacts; and
  - (iii) Continuous research on pulp mill sludge including, but not limited to:
    - A. Landspreading on non-agricultural land;
    - B. Alternative uses;
    - C. Odour control; and
    - D. Moisture content;

- (d) The following, at a minimum, with respect to continuous improvement:
- (i) To develop better control technologies/processes for BOD, TSS, greenhouse gases, phosphorous, water usage and sewer loss;
  - (ii) Research reasons for historical trend increase in phenol discharge;
  - (iii) To develop and submit to the Director a Best Management Practices Plan by May 1, 2009 to include at a minimum, the following:
    - A. In-house lab QA/QC program;
    - B. Fugitive emissions management plan;
    - C. Overall site plan showing all the air emission sources;
    - D. Operational manual;
    - E. Waste management procedures;
    - F. Management plan for land application of pulp sludge on non-agricultural land;
    - G. Waste minimization plan;
    - H. Open burn procedures;
    - I. Dredging procedures; and
    - J. Groundwater sampling procedures;
  - (iv) Implement the Best Management Practice Plan referred in subclause (d)(iii) as authorized in writing by the Director;
  - (v) Annual review and update of the Best Management Practice Plan referred in subclause (d)(iii);
  - (vi) To develop a green procurement plan;
  - (vii) At least once every three years, review of the storage and handling practices for chemicals used in the pulp and paper manufacturing process including but not limited to: inspections, risk assessments and incident reports;
  - (viii) Provide ongoing environmental training related to pulp mill operations to ANC staff; and
  - (ix) Provide educational sessions on ANC's newsprint operation to Alberta Environment staff;

- (e) Reducing and maintaining emissions levels to achieve the following internal performance targets:

Parameter	Performance Target
BOD	0.114 kg/FMT
TSS	0.346 kg/FMT
Water Usage	22.4 m <sup>3</sup> /FMT
Sewer Loss	3.4%
Phosphorous	10.5 kg/day

\*FMT – finished metric tones of pulp

- (f) Maintaining an external ANC website which includes information on the environmental program and activities at ANC; and
- (g) Preparing and making public, on or before March 31 of each year following the year that the information was collected, submit or present to Alberta Environment, and post on the Plant's website, an annual EnviroVista Progress Report that includes, at a minimum, the status of each of the commitments listed above.