

Alberta Newsprint Company

EnviroVista Progress Report

March 2018

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 4th, 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 2017 ANC continued its involvement in the Upper Athabasca River Pulp and Paper Water Quality Committee and ANC also provides the Co-Chair to this group.
 - (ii) In 2017, ANC participated through active representation on the Athabasca Watershed Planning and Advisory Council as an elected member and Vice Chair on the Board of Directors. In 2017 ANC focused efforts on participation on the Communications and Community Engagement Committee and was the lead organizer for engagement activities through a Voyageur Canoe event which occurred on the Athabasca River in June of 2017.

In 2017, ANC participated on the Alberta Water Council Source Water Protection TOR Team. ANC expects to participate in the future Source Water Protection project team in 2018.

(iii) Local Community Support

In 2017, the ANC donation committee allocated **\$10,700** (*donations/advertising*) towards the following local initiatives and non-profit organizations:

Donations

Pat Hardy School- Playground equipment
Blue Ridge Fire Department
MADD
Whitecourt Minor Soccer Association
Ride for Mom- Alzheimer's Donation
Mayerthorpe Rodeo Club
2017 Safe Grad
Special Olympics Whitecourt
WHARF –Local Animal Shelter
Boys and Girls club
School Bussing

Whitecourt Fish and Game
Mayerthorpe High school- Breakfast Program
Illusion Dance Parent Society
Town of Mayerthorpe- Community Garden
Camp He Ho Ha
Whitecourt Rodeo Committee
MS Mountain Tour
Royal Canadian Legion- Poppy Drive
Movember –Men's Health Issues
Crime Prevention
Eagle Tower Victim Services

Advertising

Regional Maple Leaf- Teenage Survival Handbook
Regional Maple Leaf- Elementary Safety Book for Children
Community Safety Net – fire safety
Community Drug Alert (SMRT)
Whitecourt Minor Hockey- Atom A Wolverines Provincial tournament

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 2017, ANC collected and distributed **\$2,466.60** to the following organizations:

Whitecourt Girl Guides
First Whitecourt Rangers
Whitecourt Trex

Go Fund Me- A. M's fight against cancer
Whitecourt Cheer Club

Corporate Donations

Throughout the year, ANC provides additional funding to various local groups and activities. In 2017, ANC allocated **\$53,470.00** towards the following organizations:

Town of Whitecourt -Senior Outings
Whitecourt Minor Hockey
Alexis Nakota Canada Day Musical Festival
Eastlink Park 2017 Sponsorship
Community Lunch Box
Alexis Nakota Sioux Nation- Christmas Party

Party in the Park
Boys and Girls Club
Eagle Tower Victim Services Golf Tournament
Donation match for A. M's fight against cancer
Arthritis Society
Mayerthorpe Fun Hockey

ANC Road

As ANC owns and operates the “ANC road” located within our FMA (forest management area), any traffic caught speeding on the road is issued a fine. In 2017, ANC collected \$7,452.00 in fines and distributed these funds to STARS and the Whitecourt Food Bank.

Christmas Donations

During each holiday season, the owner of ANC has personally donated funds to those in need. In 2017, 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)
ECHO

(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 utilize research that was conducted 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.

In 2017 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.

ANC also participated in research being led by West Central Forage association by providing sludge material to research plots in the Anselmo area.

ANC continued working with horticultural product companies to explore feasibility of utilizing ANC composted sludge in horticultural product lines for commercial sale.

ANC provided composted sludge to commercial landscaping company for tree growth assessments in the Edmonton area.

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 2017, ANC continued to investigate technologies and process optimization opportunities to decrease moisture content in sludge produced.

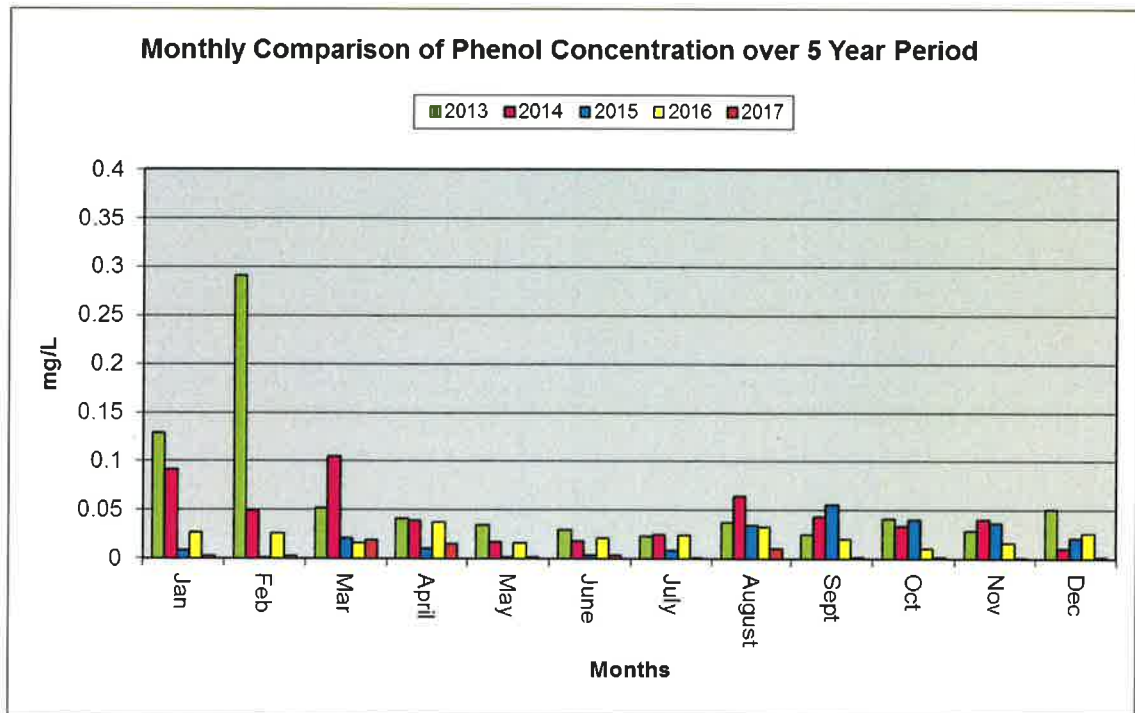
(d)

(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 2017 as its best year ever for phosphorus discharges!!**

In 2017 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 2017 being higher than the target. 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 2017 annual average phenol discharge of 0.0052 mg/L, is our 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) N/A
- (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 2017 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 2017. 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 sewerage and water used for rinsing.

ANC is in the process of converting from aqua ammonia usage to urea for effluent system nutrient requirements. Urea is not TDG regulated and poses minimal risk to the environment and to health and safety. Trials using urea were conducted in the fall of 2017 which showed no impact to the operation of the effluent treatment system.

- (vii) Reviews and inspections of the storage and handling practices for chemicals used in the mill was conducted in 2017. 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 2017, 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 2017.

- (ix) Meetings with AEP staff on a variety of issues and projects occurred throughout 2017 which assists AEP staff through providing knowledge of ANC operations.

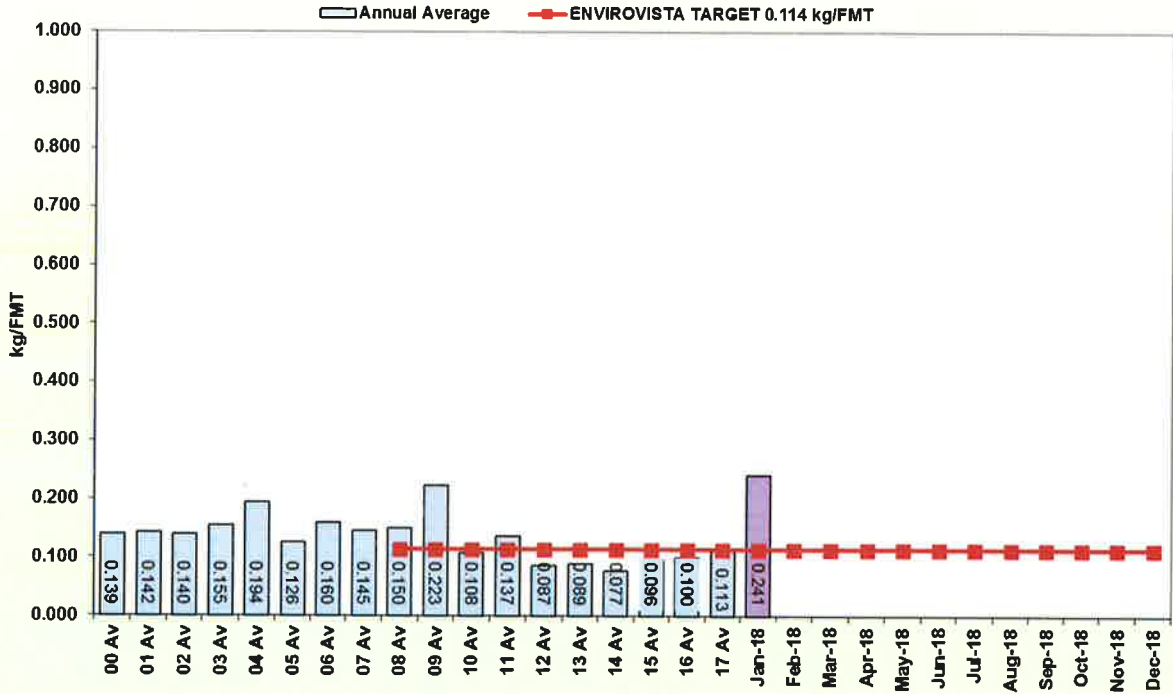
ANC strives to reduce emission levels and continually improve each year. **In 2017, ANC achieved 3 of 5 EnviroVista Champion internal performance targets!** ANC achieved our lowest phosphorus discharges ever. This was accomplished while maintaining excellent BOD and TSS treatment and reducing nutrient addition.

(e)

- i. **B.O.D - 0.114 kg/FMT - Achieved 0.113 kg/FMT!**
- ii. **T.S.S - 0.346 kg/FMT - Achieved 0.165 kg/FMT!**
- iii. **WATER USAGE - 22.4 m³/FMT - Achieved 25.2 m³/FMT.**
- iv. **SEWER LOSSES - 3.4 % - Achieved 3.83 %**
- v. **PHOSPHORUS - 10.5 kg/day - Achieved 8.00 kg/day!**

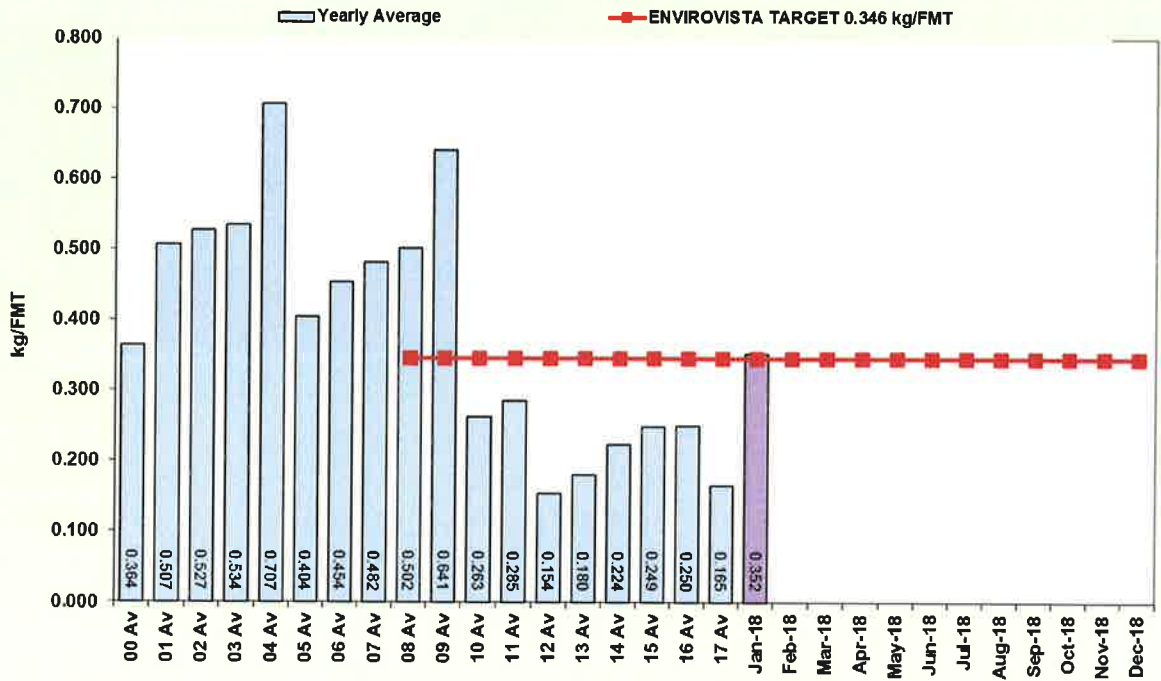
The following graphs depict these internal performance targets and display both our past and present performance achievements regarding these parameters.

Alberta Newsprint Company BOD5 Discharge



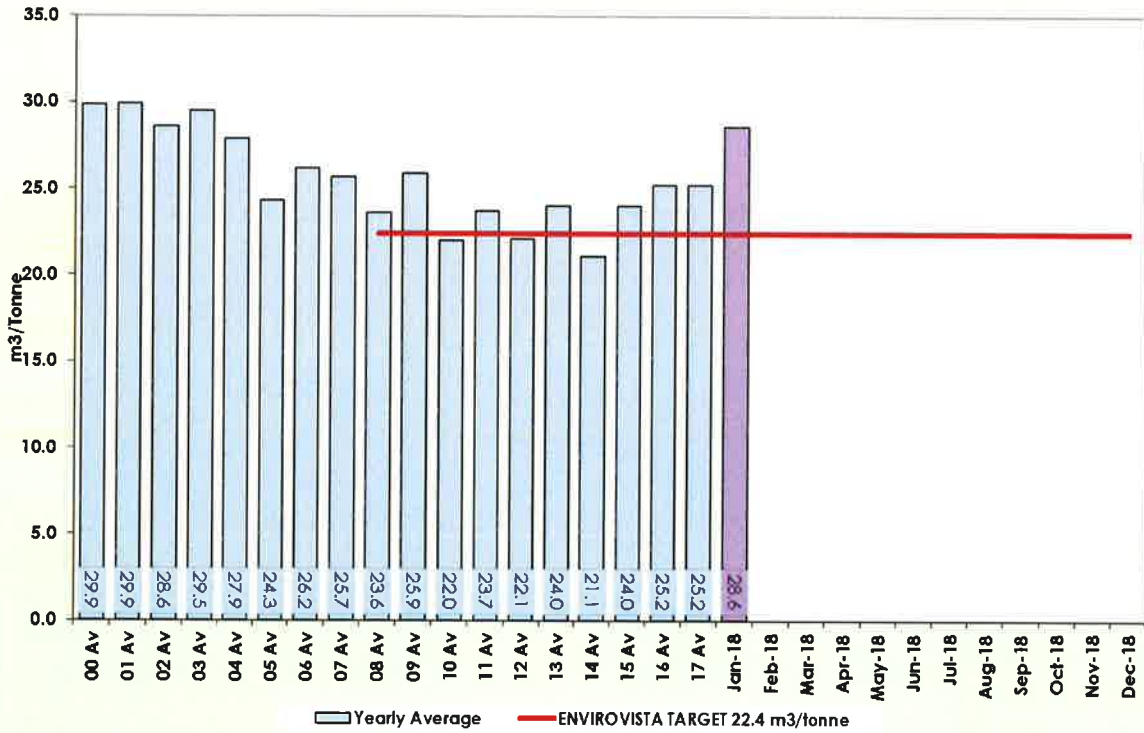
NOTE: Alberta Limit is 2.5kg/FMT, Federal Limit is 7.5kg/FMT

Alberta Newsprint Company TSS Discharge

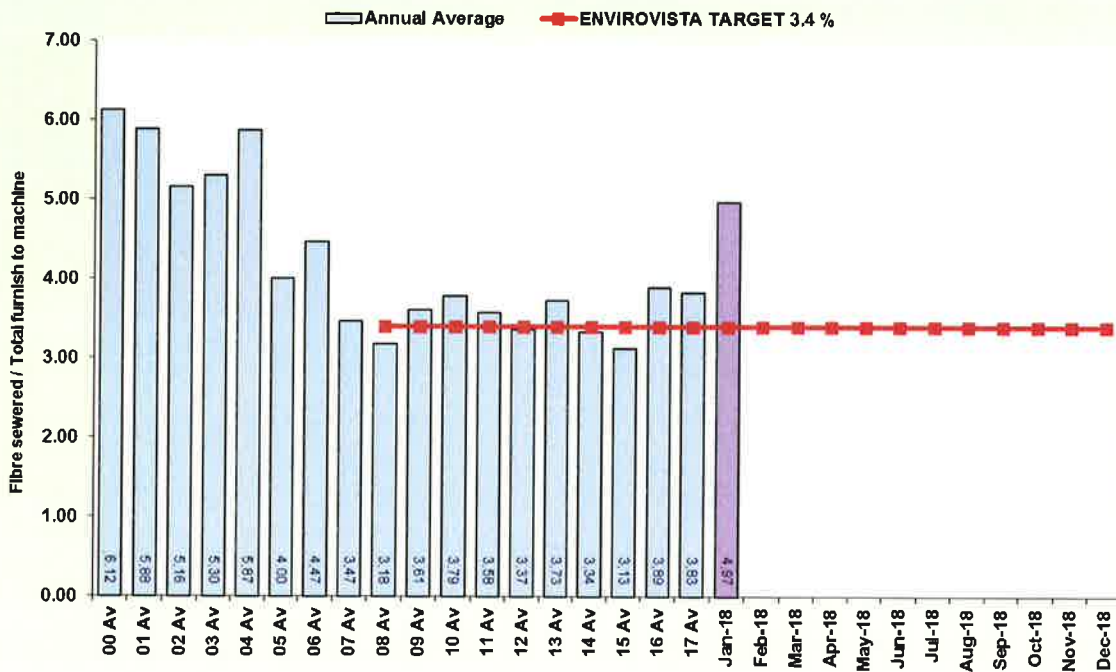


NOTE: Alberta Limit is 4kg/FMT, Federal Limit is 11.25kg/FMT

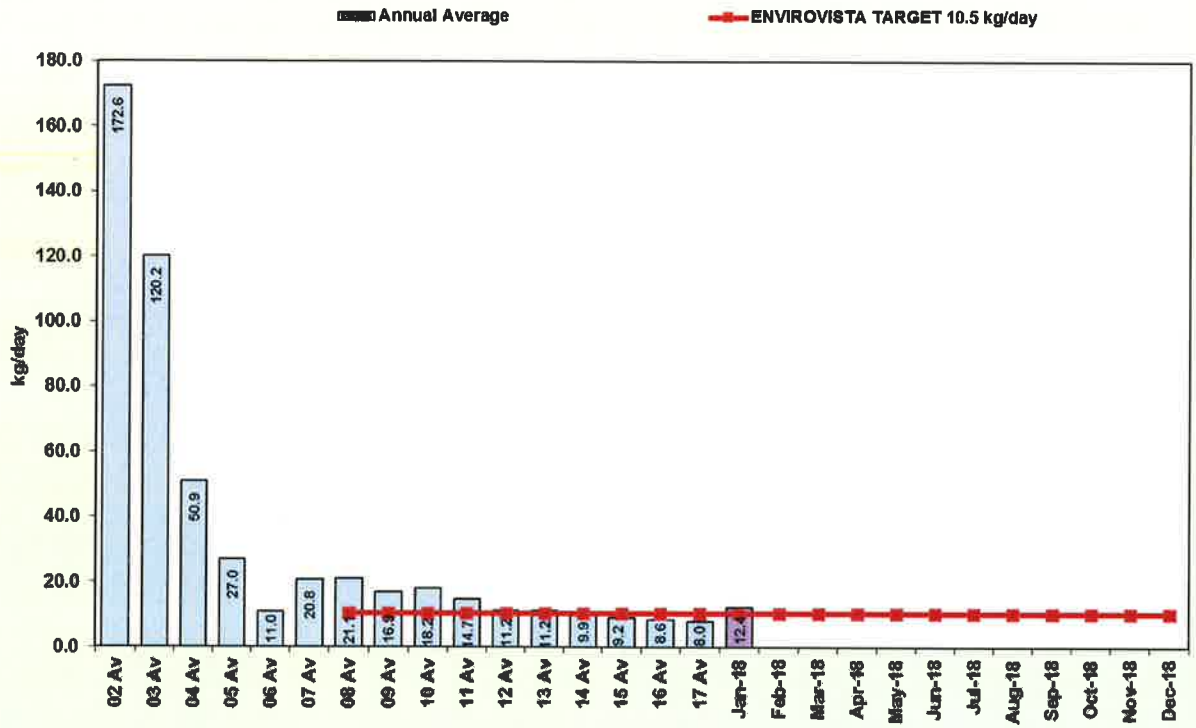
Alberta Newsprint Company
Water Usage - cubic meters of water per finished metric tonne of paper

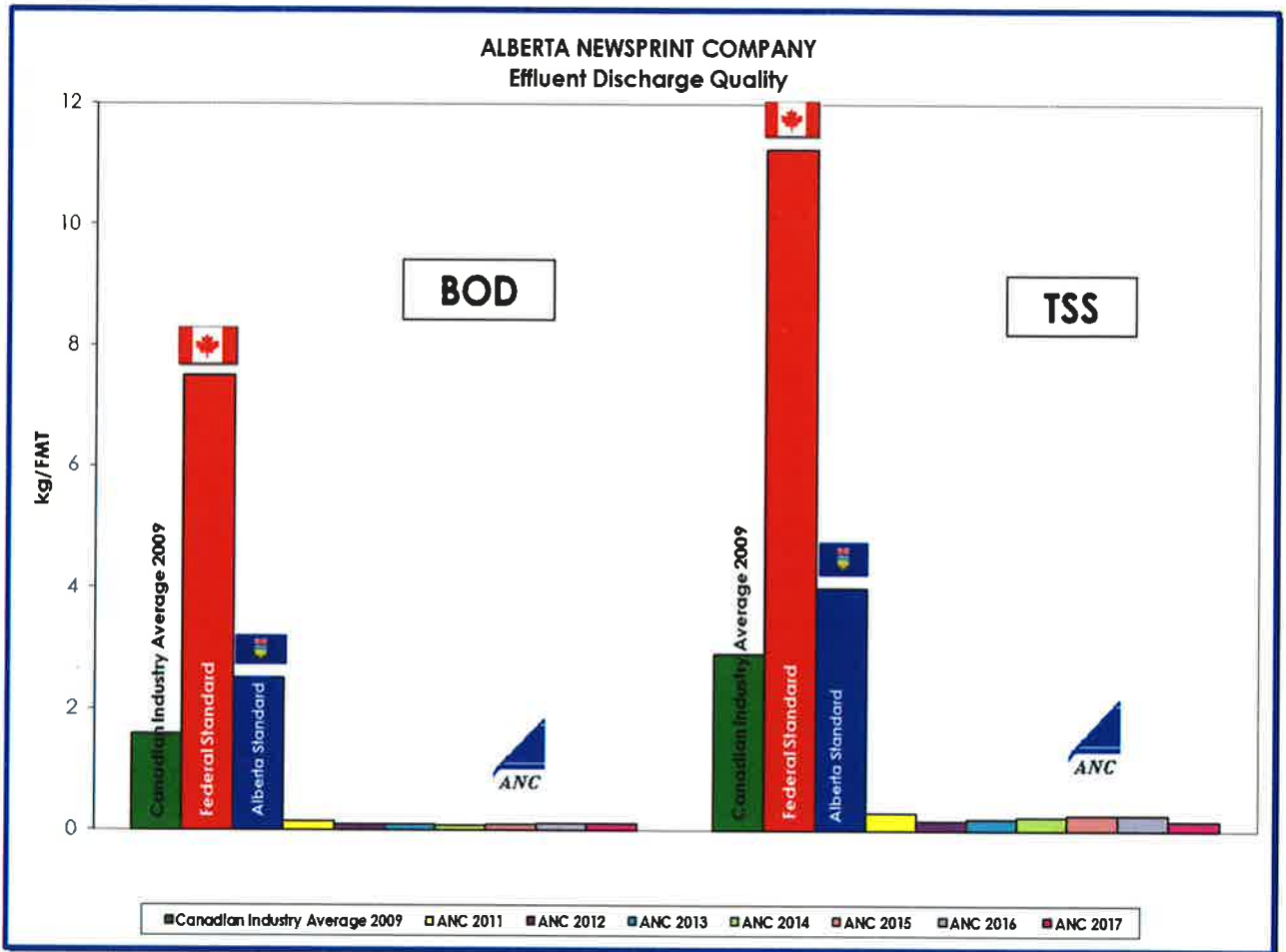


Alberta Newsprint Company
Sewer Loss



Alberta Newsprint Company Phosphorus Discharge





ANC's external web site is located at www.albertanewsprint.com. Included on this web site is information regarding the environmental program and activities at ANC.

(f) This progress report fulfills this commitment.

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 ³ /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.