## Williams Lake Power Plant



June 22, 2016

Brady Nelless, Regional Director Ministry of Environment, Environmental Protection Division Suite 325 - 1011 4th Avenue Prince George, BC V2L 3H9

## UPDATED Application to Amend Atlantic Power Preferred Equity Ltd. Permit 8808

Dear Mr. Nelless,

On July 10, 2015, Atlantic Power submitted an application to amend the Williams Lake Power Plant Air Permit 8808. The key reason for this amendment was to allow an increased proportion of retired rail ties in the fuel to the biomass energy plant. The expansion of rail tie volumes would support the renewal of the Energy Purchase Agreement with BC Hydro allowing operations beyond 2018.

Atlantic Power has conducted an extensive communications program which started early in 2015 and continues to this day. Due to the volume of questions which have been received and the relative complexity of the airshed and health studies, we are hereby issuing this updated application and engaging in a second 30 day official comment period. We want to provide stakeholders with direct access to the experts involved at an Open House planned for June 28, 2016. We welcome all inputs throughout this period.

The following two tables provide an outline of our request and the changes in discharges.

Updated Amendment Request							
1	Delete ash silo vent which has now been enclosed.						
2	Add provisions for on-site storage of treated wood residue.						
3	Increase treated wood component from 5% to 50% of the total biomass fuel supply.						
4	Delete clause which allows for a request to increase the proportion of treated wood.						
5	Authorize the acceptance of hydrocarbon spill response materials for burning in the						
	energy system. This is allowed in the current Permit but requires written authorization						
	by the Director for each instance.						
6	1						
	construction and demolition waste.						
7	Clarify the definition of the 90 day operational parameter prior to emission test.						
8	Delete the requirement to audit the continuous emission monitors with Canada EPS						
	1/PG/7 protocols. BC requirements for auditing these units continue to apply.						

## Williams Lake Power Plant



The emissions are those typical of combustion of untreated biomass combined with shredded rail ties in a boiler equipped with a 5 field electrostatic precipitator. Shredded ties will be stored in an enclosed bin with a maximum of 3000 tonnes at any time.

Summary of Changes to Discharge								
		Permit 2012-11-12	Draft 06-2016	Permit 2012-11-12	Draft, June 2016			
Rate of Discharge	m³/second	110	110	Loading (tonnes/yr)	Loading (tonnes/yr)	Change (tonnes/yr)		
Total Particulate	$mg/m^3$ at $8\% O_2$	50	20	174	69	-104		
SOx as SO₂*	$mg/m^3$ at $8\% O_2$	9.5	110	33	382	349		
NOx	$mg/m^3$ at $8\% O_2$	320	320	1111	1111	0		
HCI	$mg/m^3$ at $8\% O_2$	0	78	0	271	271		
Class 1 metals	$mg/m^3$ at $8\% O_2$	0	4.7	0	16	16		
Class 2 metals	$mg/m^3$ at $8\% O_2$	0	0.9	0	3	3		
Class III metals	$mg/m^3$ at $8\% O_2$	0	0.2	0	1	1		
PCDD/F TEQ	ng/m³ at 8% O <sub>2</sub>	0	0.1	0.0	0.0000003	0.0000003		
Chlorophenol	$\mu g/m^3$ at 8% $O_2$	0	1.3	0.0	0.0045	0.0045		
Chlorobenzene	$\mu g/m^3$ at 8% $O_2$	0	1.3	0.0	0.0045	0.0045		
PAH	μg/m³ at 8% O <sub>2</sub>	0	6.5	0.0	0.0226	0.0226		
Opacity	%	10%	10%					

Note: Permit November 12, 2012, and previous iterations allowed use of rail tie material as feedstock without restricting loading of SO2, HCl, Metals, PCDD/F, CP, CB or PAH.

Information on this project and on the application has been made available throughout the process. Copies of the application, Environmental Protection Notice, the renewal project fact sheet, dispersion modelling, health risk assessment, consultation and technical assessment reports are all available at the Williams Lake Library and online at the Ministry site:

http://www2.gov.bc.ca/gov/content/environment/air-land-water/site-permitting-compliance/atlantic-power and on the Atlantic Power website at: http://www.atlanticpower.com/williams-lake.

I, Mark Blezard, Atlantic Power Preferred Equity Ltd., 4455 Mackenzie Avenue North, Williams Lake, BC, V2G 4R7, intend to submit this amendment application to the Director to amend Permit

## Williams Lake Power Plant



8808, issued February 20, 1991 and last amended November 20, 2012 which authorizes the discharge of air contaminants, from an electrical power generating plant.

The land upon which the biomass electrical energy generating facility is situated and the discharge occurs is Lot B of District Lot 72, Cariboo District Plan PGP35292 (Parcel Identifier: 017-247-276) located at 4455 Mackenzie Avenue North, Williams Lake, BC, V2G 4R7, within the Williams Lake airshed.

Any person who may be adversely affected by the proposed amendment and wishes to provide relevant information may, within 30 days after the last date of posting, publishing, service or display, send written comments to the applicant, with a copy to the Director, Environmental Protection at 400 - 640 Borland Street, Williams Lake, BC, V2G 2T1 or via email to the Director, Environmental Protection <a href="mailto:authorizations.north@gov.bc.ca">authorizations.north@gov.bc.ca</a> and referencing the applicant name, the location, and the authorization number PA-8808 in the subject line. The identity of any respondents and the contents of anything submitted in relation to this application will become part of the public record.

Contact person Glenda Waddell

Email waddellenvironmental@gmail.com

Phone: 1-250-640-8088

I want to thank the citizens of Williams Lake for your interest in our project and hope that you take this opportunity to have any new or remaining questions fully addressed.

Sincerely,

Mark Blezard, Plant Manager Williams Lake Power Plant

Cc: Peter Lawrie, Environmental Protection Officer