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May 9, 2017

William K. Montgomery, Policy & Planning Branch Manager
Arkansas Department of Environmental Quality
Office of Air Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

## RE: Domtar A.W. LLC Additional Clarification Regarding CALPUFF Modeling Scenarios to Support BART FIP Scenarios

Dear Mr. Montgomery:

On May 2, 2017, Jeremy Jewell and Nick Kordsmeier (Trinity Consultants, Inc.) met with ADEQ staff members to discuss modeling results for the Ashdown Mill previously submitted to ADEQ on April 21, 2017. During this meeting, Trinity clarified its prior CALPUFF-based modeling work, which showed various Ashdown Mill scenarios that provide better visibility improvement as compared to the Arkansas Regional Haze FIP. As follow-up to the May 2, 2017 meeting, revised result tables are provided for following scenarios:

- Scenario 1 Power Boiler No. 1 Shutdown and Power Boiler No. 2 at baseline rates for  $SO_2$  and PM and BART FIP rate for  $NO_X$ .
- Scenario 2 Power Boiler No. 1 on natural gas only and Power Boiler No. 2 at baseline rate for PM and reduced emission rates for SO<sub>2</sub> and NO<sub>X</sub>.
- Scenario 3 Power Boiler No. 1 on natural gas only and Power Boiler No. 2 at baseline rate for PM and reduced emission rates for SO<sub>2</sub> and NO<sub>X</sub>.

The emission rates associated with each of the scenarios are summarized in the following table.

		<b>Modeled Emission Rates</b>			
Scenario	Scenario Description / Power Boiler Status	SO <sub>2</sub> (lb/hr)	NO <sub>X</sub> (lb/hr)	PM (lb/hr)	
1	Power Boiler No. 1 Shutdown	0	0	0	
	Power Boiler No. 2 at baseline rates for $SO_2$ and PM and BART FIP rate for $NO_X$	788.2	345	81.6	
2	Power Boiler No. 1 on natural gas only	0.5	191.1	5.2	
	Power Boiler No. 2 at baseline rate for PM and reduced emission rates for $SO_2$ and $NO_X$	435	293	81.6	
3	Power Boiler No. 1 on natural gas only	0.5	191.1	5.2	
	Power Boiler No. 2 at baseline rate for PM and reduced emission rates for $SO_2$ and $NO_X$	325	315	81.6	

The visibility improvement values associated with each of the scenarios relative to the FIP Power Boiler No. 2 baseline are summarized in the table below.

Scenario	98 <sup>th</sup> Percentile Visibility Impacts (dv)	Modeled Visibility Improvement Relative to FIP Baseline (∆dv)	Reference or Calculation Method	Comparison to FIP-Visibility Improvement <sup>3</sup>
FIP PB No. 2 Baseline	0.844		80 FR 18,979	
FIP PB No. 2 Controls		0.320	81 FR 66,347-66,348	
PB No. 1 (Natural Gas)	0.258		Obtained from Modeling <sup>1</sup>	
Scenario $1^2$	0.635	0 467	= 0.844 - 0.635 + 0.258	Better
Scenario 2	0.495	0.349	= 0.844 - 0.495	Equivalent
Scenario 3	0.495	0.349	= 0.844 - 0.495	Equivalent

<sup>1</sup> The PB No. 1 Natural Gas-Firing scenario impacts were obtained by calculating the difference in impacts from the Revised Baseline and Scenario 1 (files submitted to ADEQ on April 21, 2017). This difference represents the impacts from PB No. 1 firing natural gas only.

 $^{2}$  Note that the Scenario 1 modeled visibility improvement represents FIP NO<sub>X</sub> controls on Power Boiler No. 2 in addition to the removal of Power Boiler No. 1 combusting natural gas only.

<sup>3</sup> Domtar is contesting the FIP on the basis of its CALPUFF "margin of error" analysis. The above analysis was performed using CALPUFF strictly for purposes of comparing the scenarios with the FIP. Domtar still asserts that the visibility improvements resulting from the use of the CALPUFF model are within the model's margin of error, and as such, with respect to the Ashdown Mill, the CALPUFF model results underlying the FIP do not show a reasonably anticipated improvement in visibility.

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Thank you for your consideration of this information.

Sincerely,

Kelley R. Clark

Kelley Crouch Environmental Manager

cc: Annabeth Reitter, Domtar Mark A. Thimke, Foley & Lardner LLP Jeremy Jewell, Trinity Consultants, Inc.