

INTERSTATE PAPER, LLC
Georgia
Visibility Results for 2001-2003 CALPUFF Screening Runs
CALPOST, Method 6
Using annual average Haze Index (HI) values in processing

Table 1. Stack parameters and emissions

Stack ID #	Lambert Conformal Coordinates		Stack Height	Base Elevation	Diameter	Gas Exit Velocity	Stack Gas Exit Temp.	SO ₂ Emissions	SO ₄ Emissions	NO _x Emissions	PM ₁₀ Emissions	PM _{2.5} Emissions	NH ₃ Emissions
	LCC East	LCC North											
	km	km	m	m	m	m/s	K	g/s	g/s	g/s	g/s	g/s	g/s
PB	1470.712	-789.031	46.04	4.30	1.98	15.45	470.92	60.5000	0.0000	8.7000	3.4000	2.0000	
LK	1470.714	-788.897	15.24	3.60	1.52	4.96	342.09	0.1600	0.0000	2.2000	0.7400	0.7200	
RB	1470.714	-789.026	46.04	4.20	2.74	13.73	353.37	0.1200	0.0000	8.8000	5.5000	5.4000	

Table 2. Particle Speciation

Stack ID #	particle speciation		Condensable				Filterable									
	filterable PM ₁₀	condensable PM ₁₀	organic condensable (OC)		inorganic condensable		COARSE		Soil				Elemental Carbon (EC)			
			0.625-1.0 µm (g/s)	0.5-0.625 µm (g/s)	0.625-1.0 µm (g/s)	0.5-0.625 µm (g/s)	6-10 µm (g/s)	2.5-6 µm (g/s)	1.25-2.5 µm (g/s)	1.0-1.25 µm (g/s)	0.625-1.0 µm (g/s)	0.5-0.625 µm (g/s)	1.25-2.5 µm (g/s)	1.0-1.25 µm (g/s)	0.625-1.0 µm (g/s)	0.5-0.625 µm (g/s)
PB			1.7000	1.7000												
LK			0.3700	0.3700												
RB			2.7500	2.7500												

Note: Stack parameters and emission data obtained from "EPD BART Emissions.xls" file. The PM speciation was not provided by the state. All PM₁₀ - H₂SO₄ emissions were equally divided between the two size categories of OC. This is a conservative approach since, Organic condensable have extinction efficiency of 4 m²/g.

Table 3. Summary of Visibility Results

Class I Area	2001	2002	2003	Annual average background b_{ext}
	Maximum delta-deciview, (# days>0.5 dv, # days >1 dv)			(Mm ⁻¹)
Cape Romain	0.330 (0 0)	0.408 (0 0)	0.242 (0 0)	21.22
Okefenokee	0.670 (4 0)	0.561 (3 0)	1.153 (4 1)	21.41
St Marks	0.192 (0 0)	0.196 (0 0)	0.247 (0 0)	21.54
Wolf Island	1.653 (8 1)	0.963 (12 0)	0.938 (10 0)	21.33

Table 4. Visibility Results – 8 highest values

	2001		2002		2003		
	Change in Deciview (dv)	Day	Change in Deciview (dv)	Day	Change in Deciview (dv)	Day	Rank
Okefenokee	0.670	Feb 13	0.561	Dec 8	1.153	Jan 31	1
	0.579	Nov 19	0.516	Oct 22	0.630	Dec 27	2
	0.520	Oct 22	0.500	Jan 27	0.523	Nov 8	3
	0.514	Dec 4	0.462	Oct 25	0.500	Sep 10	4
	0.431	Jun 20	0.461	Dec 18	0.391	Nov 21	5
	0.431	Feb 12	0.456	Jan 26	0.341	Oct 31	6
	0.431	Jan 14	0.401	Oct 14	0.336	Jan 28	7
	0.318	Oct 23	0.338	Feb 3	0.328	Nov 11	8
Wolf Island	1.653	Jan 15	0.963	Jan 28	0.938	Dec 8	1
	0.851	Sep 17	0.962	Dec 27	0.763	Sep 7	2
	0.759	Jan 10	0.943	Nov 26	0.760	Sep 8	3
	0.755	Feb 6	0.823	Sep 17	0.707	Jul 15	4
	0.675	Jan 21	0.751	Nov 1	0.630	Nov 22	5
	0.665	Sep 9	0.731	Dec 30	0.609	Oct 15	6
	0.584	Sep 18	0.691	Jan 16	0.574	Oct 4	7
	0.573	Dec 21	0.650	Oct 26	0.565	Nov 7	8