

Appendix E
Florida Department of Environmental Protection
Air Quality Permit Application

Attachment C-7

***Air Quality Analysis / Existing
Ambient Air Quality***

Air Quality Analysis (Rule 62-212.400(7), F.A.C.)

Background air quality levels for the project area are described in this section and are based on available data collected at monitoring stations located in Broward County. Data from the Broward County air quality monitoring stations were used to characterize ambient air quality related to regulated criteria air pollutants. The pollutants include SO₂, CO, NO₂, O₃, PM₁₀, PM_{2.5}, and Pb. A summary of these data is presented in Table 1.

Table 1 Existing Ambient Air Concentrations						
Air Pollutant	Averaging Period	Location City	2003	2004	2005	Background^e
Sulfur Dioxide - SO ₂ (ppm)	3-Hour ^a	Fort Lauderdale	0.058	0.080	0.058	0.080
	24-Hour ^a	Fort Lauderdale	0.011	0.018	0.009	0.018
	Annual	Fort Lauderdale	0.002	0.002	0.002	0.002
Carbon Monoxide - CO (ppm)	1-Hour ^a	Fort Lauderdale	5.3	4.2	4.6	5.3
		Hollywood	3.8	3.6	2.7	3.8
		Pompano Beach	3.1	3.0	3.1	3.1
		Hollywood	4.3	4.0	2.6	4.3
		Lauderdale Lakes	4.3	4.2	ND	4.3
	8-Hour ^a	Fort Lauderdale	3.7	3.4	2.5	3.7
		Hollywood	2.5	2.9	2.0	2.9
		Pompano Beach	1.8	2.0	2.1	2.1
		Hollywood	2.3	3.2	1.9	3.2
Nitrogen Dioxide - NO ₂ (ppm)	Annual ^b	Coral Springs	0.009	0.008	0.007	0.009
		Dania	0.009	0.008	0.009	0.009
Ozone - O ₃ (ppm)	8-Hour ^a	Coral Springs	0.068	0.063	0.065	0.068
		Pompano Beach	0.068	0.064	0.06	0.068
		Dania	0.070	0.061	0.062	0.07
Particulate Matter Less than 10 micrometers in diameter - PM ₁₀ (µg/m ³)	24-Hour ^a	Fort Lauderdale	34	40	28	40
		Fort Lauderdale	35	43	29	43
		Davie	33	34	24	34
		Pompano Beach	41	50	36	50
		Hollywood	32	52	36	52
		Winston Park Blvd. ^c	31	34	26	34
	Annual ^b	Fort Lauderdale	21	20	18	21
		Fort Lauderdale	19	19	18	19
		Davie	18	16	16	18
		Pompano Beach	21	18	18	21
Particulate Matter Less than 2.5 micrometers in diameter - PM _{2.4} (µg/m ³)	24-Hour ^a	Hollywood	17	20	19	20
		Winston Park Blvd. ^c	17	16	16	17
		Davie	19	23	21	23
	Annual ^b	Pompano Beach	18	22	21	22
		Hollywood	17	20	17	20
		Davie	7.8	8.2	8.4	8.4
		Pompano Beach	8.0	8.4	8.3	8.4
Lead	Quarterly	Hollywood	8.2	8.8	8.5	8.8
		Winston Park Blvd.	0.05 ^d			0.05

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Table 1
Existing Ambient Air Concentrations

Air Pollutant	Averaging Period	Location City	2003	2004	2005	Background ^e
<p>Source: U.S. EPA 2005b.</p> <p>Notes:</p> <p>^a The second highest designation indicates that the concentration listed is representative of the second highest concentration measured at the monitoring station. The EPA uses annual summary measures of air pollution to gauge compliance with air quality standards established by the Clean Air Act. The standards are framed in terms of different summary measures for each pollutant. This report lists standards-related air pollution annual summary values for all six criteria pollutants for monitoring stations in Broward county. Some air pollution values in the report are labeled "2nd max," which means the next-to-highest (second highest) value recorded for a geographic area. The report gives the second highest value when the applicable air quality standard allows one "exceedance" per year - one day when the measured pollutant concentration is higher than the value set in the standard. Thus the second highest value indicates whether the level of the standard was exceeded during a year, as one exceedance is allowed.</p> <p>^b The highest annual average concentration.</p> <p>^c The city was not listed for this location.</p> <p>^d Lead monitoring was discontinued after the first quarter of 2000. The value listed in the highest quarterly average recorded from 1996 to 2000. This value was recorded in the second quarter of 1996.</p> <p>^e The background value is the highest value recorded for the years 2003 – 2005, for each parameter as listed in the table.</p> <p>Key: ND = No data. ppm = Parts per million.</p>						