

Appendix E - SUN VALLEY ENERGY PROJECT

Cooling Tower Emissions

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BY KLC	DATE 2/8/06	

Data:

Manufacturer: Marley

No. of cells: 5

Drift Loss: 0.0005%

Maximum TDS in Circulating Water: 5,000 mg/l

Circulating Water Rate: 35,500 gpm

Fan Exit Height : 39.09 ft AGL

Exhaust Fan Diameter: 22 ft

PM10 Emissions (lb/hr) = (Maximum TDS)*[(3.785*60)/(454*1000)]*(Circulating Water Rate)*(Drift Loss)

Water Source: Reclaimed/Recycled Water

Tower Dimensions: Deck Height: 27.09 ft AGL; Deck Length: 210.7 ft; Deck Width: 36.67 ft

Assumptions:

Cooling tower emissions based on 3,468 hr/yr operation

100% of TDS in solution is converted to PM10 at a drift loss of 0.0005%

Pollutant	Maximum TDS in circulating water (mg/l)	Circulating Water Rate (gpm)	Drift Loss (percent)	PM10 Emissions (lb/hr)	PM10 Emissions (lb/year)	PM10 Emissions ¹¹ (lb/month)	30 Day Average ¹² (lb/day)
PM10	5,000	35,500	0.00050	0.4439	1,539.60	128.30	4

¹¹ PM10 emissions (lb/year) divided by 12

¹² PM10 emissions (lb/month) divided by 30