B: **Four (4) Closed Circuit Non-Contact Cooling Towers from cooling water system; Concept four operating one standby; 5 installed**

Number of Cooling Towers in Operation   4 and an additional one on standby
One Cooling Tower Water Circulation Rate   195 cubic meter/hr/cooling tower
                                                                                    3.25 cubic meter/min/cooling tower
                                                                                     859 gal/min/cooling tower
                                                                                 51,540 gal/hr/cooling tower

Operating Amount per Cooling Tower		Operating Time
	Units	Hours
451,490,400	Gallons/yr	8760

Air Contaminant	Emission Factors per Cooling Tower (lb/hr)	PTE (ton/yr/tower)	PTE from Operating Towers (ton/yr)
PM-10	0.26	1.13	4.52
PM-2.5	0.26	1.13	4.52
PM	0.26	1.13	4.52
VOC	0.009	0.0377	0.15

Emission Calculations per Cooling Tower

Water Ciruclation Rate	51,540	gal/hr/cooling tower	@88 degrees F = 31°C
Average Annual Solid Concentration in water	3,000	ppm	
Average Annual VOC Concentration in water	100.0	ppm	
	0.02%	AP-42 Table 13.4-1 for induced draft drift in cooling towers	
Drift Volume	10.31	gal/hr/cooling tower	
Water Density	8.3453	lb/gal	
Drift Mass	86.02	lb/hr/cooling tower	
PM/PM10/PM2.5	0.2581	lb/hr based on 3,000 ppm of total solids in cooling water	
VOC	0.0086	lb/hr based on 100 ppm of VOCs in cooling water	

Methodology
PM: 51,540 gal/hr x 0.02% drift x 3000 ppm ÷ 1,000,000 = 0.2581 lb/hr of PM
VOC: 51,540 gal/hr x 0.02% drift x 100 ppm ÷ 1,000,000 = 0.0086 lb/hr of VOC

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