

Table 2 Estimated Effluent Constituent Concentrations for CCNPP Unit 3

Effluent Stream ¹	Flow (lpm) ¹	Constituent Concentration (mg/l)									
		NaOCl	NaOH	HEDP	Petrol. Distil.	Sodium Bisulfite	TDS	Silica	Nitrates	NH3	BOD
CWS Blowdown ³	65,695	1.45	3.61	1.01	1.73	1.01	35,000	6	20	2	
ESWS Blowdown ⁴	3,558	0.098	0.244	1.01			743	0.2	4.32	0.74	
Desal Plant ⁵	3,994						39,700	5.9	16.07	1.63	
Treated Sanitary ⁶	76									1	10.6
Misc Aqueous	208										
Treated Radwaste ⁷	4										
Total	73,535	1.30	3.24	0.95	1.55	0.90	33,461	5.7	18.9	1.91	0.011

¹ Taken from Technical Report Table 2.3-1.

² These chemicals are added to effluents other than rad waste in the Liquid Waste Storage System as part of biological and chemical treatment and thus are substantially depleted prior to release of the effluent to the Chesapeake Bay.

³ NaOCl, NaOH, HEDP, Petroleum Distillates, and Sodium Bisulfate based on chemicals added from Technical Report Table 6.4-2 and CWS blowdown; TDS based on value used for air emissions calculations; silica, nitrates, and NH3 based on constituent data in Calvert Cliffs Desalination Study Table 4.4-1 (50% recovery); and other concentrations taken from Environmental Report Table 3.6-1 that provides data on concentrations of total reduced chlorine, total organic carbon, and total suspended solids.

⁴ NaOCl, NaOH, HEDP, Petroleum Distillates, and Sodium Bisulfate based on chemicals added from Technical Report Table 6.4-2 and ESWS blowdown; TDS, silica, nitrates, and NH3 based on constituent data in Calvert Cliffs Desalination Study Table 4.4-1; and other concentrations taken from Environmental Report Table 3.6-1.

⁵ TDS, silica, nitrates, and NH3 based on constituent data in Calvert Cliffs Desalination Study Table 4.4-1.

⁶ Constituent concentrations (except TRC and TSS) are from Technical Report Table 6.4-4 and are based on effluent for Units 1 and 2 wastewater treatment plant and do not reflect tertiary treatment for Unit 3, which will result in improvements in effluent quality. TRC and TDS data from Environmental Report Table 3.6-1.

⁷ Waste stream contains only very small amounts of radioactive material that would be diluted by a factor of 250 or more when combined with the other effluent streams.

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Constituent Concentration (mg/l)

COD	TOC	TSS	Arsenic	Chromium	Copper	Nickel	Zinc	TRC	Fecal Col	H2SO4²	NaOH²
	1.4	5.2						0.1			
								0.1			
26	5.6	3.4	0.014	0.041	0.022	0.028	0.06	0.1	12		
0.027	1.26	4.65	1.4E-05	4.2E-05	2.3E-05	2.9E-05	6.2E-05	0.094	0.012		