



Tower Power Station
 Licence Number: 5357
 Licence Holder: EDL CSM (NSW) PTY LTD
 Licensee Address: Douglas Park Drive
 Douglas Park NSW 2569
 Dates: FY 2020-21

Continuous monitoring for ambient NOx, O3 (taken off site) and point source NO3 air emissions;
 Spot sampling weekly during discharge for First Flush pH and, visible oil and grease (O&G);
 Spot sampling monthly for Process Water Effluent O&G, pH;
 Volume monitoring daily for waste water discharges.

Month	Location of monitoring point	Sampled	Obtained	Published	Pollutant	Units	Monitoring Frequency and Limit	Measurement during month	Min	Mean	Max	Licence Limit	Exceedance (Yes/No)	
Jul-20	Point 10 - Ambient air and weather monitoring station		31/08/20	2/09/20	NOx	ppb	Continuous	Continuous	0	7	73			
			31/08/20	2/09/20	O3	ppb	Continuous	Continuous	0	18	33			
	Point 11 - Air emissions monitoring		5/08/20	10/08/20	NOx	ppm measured as g/min	Continuous with limit of 2132 g/min	Continuous	< 2132 g/min			< 2132 g/min	No	
	Point 8 - First Flush Effluent quality monitoring		5/08/20	10/08/20	O&G	mg/L	Weekly during any discharge - No visible oil	11	None visible					
			5/08/20	10/08/20	pH		Weekly during any discharge	11	7.22	7.59	8.14			
			7/07/20	22/07/20	10/08/20	TSS	mg/L	No requirement	0	-				First flush was empty during sampling
			7/07/20	22/07/20	10/08/20	Salinity	ppt	No requirement	0	-				
	Point 9 - Process Water Effluent quality monitoring		7/07/20	22/07/20	10/08/20	pH		Monthly	1	7.22				
			7/07/20	22/07/20	10/08/20	O&G	mg/L	Monthly	1	<5				
			7/07/20	22/07/20	10/08/20	TDS	mg/L	No requirement	1	101				
			7/07/20	22/07/20	10/08/20	TSS	mg/L	No requirement	1	9				
		22/07/20	22/07/20	10/08/20	Salinity	ppt	No requirement	1	0.122					
		22/07/20	22/07/20	10/08/20	Salinity	ppt	No requirement	1	0.122					
Aug-20	Point 10 - Ambient air and weather monitoring station		11/09/20	28/09/20	NOx	ppb	Continuous	Continuous	0	2	29			
			11/09/20	28/09/20	O3	ppb	Continuous	Continuous	-2	20	42			
	Point 11 - Air emissions monitoring		23/09/20	28/09/20	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No	
	Point 8 - First Flush Effluent quality monitoring		3/09/20	3/09/20	O&G	mg/L	Weekly during any discharge - no visible oil	12	None visible					
			3/09/20	3/09/20	pH		Weekly during any discharge	12	7.6	8.07	8.43			
			5/08/20	1/09/20	2/09/20	TSS	mg/L	No requirement	0	-				First flush was empty during sampling
			5/08/20	1/09/20	2/09/20	Salinity	ppt	No requirement	0	-				
	Point 9 - Process Water Effluent quality monitoring		5/08/20	1/09/20	2/09/20	pH		Monthly	1	7.33				
			5/08/20	1/09/20	2/09/20	O&G	mg/L	Monthly	1	< 5				
			5/08/20	1/09/20	2/09/20	TDS	mg/L	No requirement	1	123				
			5/08/20	1/09/20	2/09/20	TSS	mg/L	No requirement	1	13				
		5/08/20	1/09/20	2/09/20	Salinity	ppt	No requirement	1	0.146					
		5/08/20	1/09/20	2/09/20	Salinity	ppt	No requirement	1	0.146					
Sep-20	Point 10 - Ambient air and weather monitoring station		12/10/20	15/10/20	NOx	ppb	Continuous	Continuous	-1	6	66			
			12/10/20	15/10/20	O3	ppb	Continuous	Continuous	2	21	46			
	Point 11 - Air emissions monitoring		2/10/20	15/10/20	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No	
	Point 8 - First Flush Effluent quality monitoring		1/10/20	15/10/20	O&G	mg/L	Weekly during any discharge - no visible oil	11	nil					
			1/10/20	15/10/20	pH		Weekly during any discharge	11	7.58	7.95	8.26			
			2/09/20	21/09/20	28/09/20	TSS	mg/L	No requirement	0	-				First flush was empty during sampling
			2/09/20	21/09/20	28/09/20	Salinity	ppt	No requirement	0	-				
	Point 9 - Process Water Effluent quality monitoring		2/09/20	21/09/20	28/09/20	pH		Monthly	1	7.67				
			2/09/20	21/09/20	28/09/20	O&G	mg/L	Monthly	1	<5				
			2/09/20	21/09/20	28/09/20	TDS	mg/L	No requirement	1	5				
			2/09/20	21/09/20	28/09/20	TSS	mg/L	No requirement	1	5				
		2/09/20	21/09/20	28/09/20	Salinity	ppt	No requirement	1	0.161					
		2/09/20	21/09/20	28/09/20	Salinity	ppt	No requirement	1	0.161					
Oct-20	Point 10 - Ambient air and weather monitoring station		12/11/20	16/11/20	NOx	ppb	Continuous	Continuous	1	8	76			
			12/11/20	16/11/20	O3	ppb	Continuous	Continuous	4	23	66			
	Point 11 - Air emissions monitoring		13/11/20	16/11/20	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No	
	Point 8 - First Flush Effluent quality monitoring		5/11/20	16/11/20	O&G	mg/L	Weekly during any discharge - no visible oil	5	nil					
			5/11/20	16/11/20	pH		Weekly during any discharge	5	7.4	7.96	8.39			
			8/10/20	6/11/20	16/11/20	TSS	mg/L	No requirement	1	10				
			8/10/20	6/11/20	16/11/20	Salinity	ppt	No requirement	1	0.177				
	Point 9 - Process Water Effluent quality monitoring		8/10/20	6/11/20	16/11/20	pH		Monthly	1	7.35				
			8/10/20	6/11/20	16/11/20	O&G	mg/L	Monthly	1	<5				
			8/10/20	6/11/20	16/11/20	TDS	mg/L	No requirement	1	168				
			8/10/20	6/11/20	16/11/20	TSS	mg/L	No requirement	1	14				
		8/10/20	6/11/20	16/11/20	Salinity	ppt	No requirement	1	0.2					
		8/10/20	6/11/20	16/11/20	Salinity	ppt	No requirement	1	0.2					
Nov-20	Point 10 - Ambient air and weather monitoring station		11/12/20	15/12/20	NOx	ppb	Continuous	Continuous	0	6	86			
			11/12/20	15/12/20	O3	ppb	Continuous	Continuous	1	21	74			
	Point 11 - Air emissions monitoring		15/12/20	15/12/20	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No	
	Point 8 - First Flush Effluent quality monitoring		4/12/20	15/12/20	O&G	mg/L	Weekly during any discharge - no visible oil	15	Nil					
			4/12/20	15/12/20	pH		Weekly during any discharge	15	7.17	7.88	8.43			
			4/11/20	16/11/20	1/12/20	TSS	mg/L	No requirement	1	13				
			4/11/20	16/11/20	1/12/20	Salinity	ppt	No requirement	1	0.269				
	Point 9 - Process Water Effluent quality monitoring		4/11/20	16/11/20	1/12/20	pH		Monthly	1	7.31				
			4/11/20	16/11/20	1/12/20	O&G	mg/L	Monthly	1	<5				
			4/11/20	16/11/20	1/12/20	TDS	mg/L	No requirement	1	104				
			4/11/20	16/11/20	1/12/20	TSS	mg/L	No requirement	1	9				
		4/11/20	16/11/20	1/12/20	Salinity	ppt	No requirement	1	0.127					
		4/11/20	16/11/20	1/12/20	Salinity	ppt	No requirement	1	0.127					

Dec-20	Point 10 - Ambient air and weather monitoring station	12/01/21	12/01/21	NOx	ppb	Continuous	Continuous	0	6	56				
		12/01/21	12/01/21	O3	ppb	Continuous	Continuous	1	17	60				
	Point 11 - Air emissions monitoring	15/12/20	15/12/20	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No		
	Point 8 - First Flush Effluent quality monitoring		4/01/20	12/01/21	O&G	mg/L	Weekly during any discharge - no visible oil	12	nil					
			4/01/20	12/01/21	pH		Weekly during any discharge	12	7.26	7.81	8.3			
			2/12/20	14/12/20	15/12/20	TSS	mg/L	No requirement	1	10				
			2/12/20	14/12/20	15/12/20	Salinity	ppt	No requirement	1	0.337				
			2/12/20	14/12/20	15/12/20	pH		Monthly	1	6.76				
	Point 9 - Process Water Effluent quality monitoring		2/12/20	14/12/20	15/12/20	O&G	mg/L	Monthly	1	<5				
			2/12/20	14/12/20	15/12/20	TDS	mg/L	No requirement	1	97				
		2/12/20	14/12/20	15/12/20	TSS	mg/L	No requirement	1	9					
		2/12/20	14/12/20	15/12/20	Salinity	ppt	No requirement	1	0.116					
		2/12/20	14/12/20	15/12/20				1						
Jan-21	Point 10 - Ambient air and weather monitoring station	12/02/21	16/02/21	NOx	ppb	Continuous	Continuous	0	6	41				
		12/02/21	16/02/21	O3	ppb	Continuous	Continuous	0	19	92				
	Point 11 - Air emissions monitoring	12/02/21	16/02/21	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No		
	Point 8 - First Flush Effluent quality monitoring		12/02/21	16/02/21	O&G	mg/L	Weekly during any discharge - no visible oil	14	nil			nil visual	No	
			15/01/21	2/02/21	16/02/21	pH	Weekly during any discharge	14	7.44	8	8.32	6.5-8.5	No	
			15/01/21	2/02/21	16/02/21	TSS	mg/L	No requirement	0	-				
			15/01/21	2/02/21	16/02/21	Salinity	ppt	No requirement	0	-				
			15/01/21	2/02/21	16/02/21	pH		Monthly	1	11.74			6.5-8.5	Yes
	Point 9 - Process Water Effluent quality monitoring		15/01/21	2/02/21	16/02/21	O&G	mg/L	Monthly	1	<5			nil visual	No
			15/01/21	2/02/21	16/02/21	TDS	mg/L	No requirement	1	812				
		15/01/21	2/02/21	16/02/21	TSS	mg/L	No requirement	1	9					
		15/01/21	2/02/21	16/02/21	Salinity	ppt	No requirement	1	0.93					
		15/01/21	2/02/21	16/02/21				1						
Feb-21	Point 10 - Ambient air and weather monitoring station	12/03/21	15/03/21	NOx	ppb	Continuous	Continuous	0	6	49				
		12/03/21	15/03/21	O3	ppb	Continuous	Continuous	1	15	57				
	Point 11 - Air emissions monitoring	5/03/21	15/03/21	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No		
	Point 8 - First Flush Effluent quality monitoring		5/03/21	15/03/21	O&G	mg/L	Weekly during any discharge - no visible oil	16	nil			nil visual	No	
			5/03/21	15/03/21	pH		Weekly during any discharge	16	7.18	7.78	8.45	6.5-8.5	No	
			3/02/21	17/02/21	2/03/21	TSS	mg/L	No requirement	0	-				
			3/02/21	17/02/21	2/03/21	Salinity	ppt	No requirement	0	-				
			3/02/21	17/02/21	2/03/21	pH		Monthly	1	7.28			6.5-8.5	No
	Point 9 - Process Water Effluent quality monitoring		3/02/21	17/02/21	2/03/21	O&G	mg/L	Monthly	1	<5			nil visual	No
			3/02/21	17/02/21	2/03/21	TDS	mg/L	No requirement	1	125				
		3/02/21	17/02/21	2/03/21	TSS	mg/L	No requirement	1	6					
		3/02/21	17/02/21	2/03/21	Salinity	ppt	No requirement	1	0.15					
		3/02/21	17/02/21	2/03/21				1						
Mar-21	Point 10 - Ambient air and weather monitoring station	12/04/21	13/04/21	NOx	ppb	Continuous	Continuous	0	5	56				
		12/04/21	13/04/21	O3	ppb	Continuous	Continuous	0	17	45				
	Point 11 - Air emissions monitoring	6/04/21	7/04/21	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	<2132 g/min			< 2132 g/min	No		
	Point 8 - First Flush Effluent quality monitoring		6/04/21	7/04/21	O&G	mg/L	Weekly during any discharge - no visible oil	19	nil			nil visual	No	
			6/04/21	7/04/21	pH		Weekly during any discharge	19	7.16	7.78	8.39	6.5-8.5	No	
			3/03/21	19/02/21	7/04/21	TSS	mg/L	No requirement	0	-				
			3/03/21	19/02/21	7/04/21	Salinity	ppt	No requirement	0	-				
			3/03/21	19/02/21	7/04/21	pH		Monthly	1	7.84			6.5-8.5	No
	Point 9 - Process Water Effluent quality monitoring		3/03/21	19/02/21	7/04/21	O&G	mg/L	Monthly	1	<5			nil visual	No
			3/03/21	19/02/21	7/04/21	TDS	mg/L	No requirement	1	137				
		3/03/21	19/02/21	7/04/21	TSS	mg/L	No requirement	1	9					
		3/03/21	19/02/21	7/04/21	Salinity	ppt	No requirement	1	0.166					
		3/03/21	19/02/21	7/04/21				1						
Apr-21	Point 10 - Ambient air and weather monitoring station	12/05/21	17/05/21	NOx	ppb	Continuous	Continuous	0	6	47				
		12/05/21	17/05/21	O3	ppb	Continuous	Continuous	0	17	48				
	Point 11 - Air emissions monitoring	4/05/21	4/05/21	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	< 2132 g/min			< 2132 g/min	No		
	Point 8 - First Flush Effluent quality monitoring		3/05/21	4/05/21	O&G	mg/L	Weekly during any discharge - no visible oil	13	nil			nil visual	No	
			3/05/21	4/05/21	pH		Weekly during any discharge	13	7.6	7.97	8.21	6.5-8.5	No	
			16/04/21	4/05/21	4/05/21	TSS	mg/L	No requirement	0	-				
			16/04/21	4/05/21	4/05/21	Salinity	ppt	No requirement	0	-				
			16/04/21	4/05/21	4/05/21	pH		Monthly	1	7.64			6.5-8.5	No
	Point 9 - Process Water Effluent quality monitoring		16/04/21	4/05/21	4/05/21	O&G	mg/L	Monthly	1	<5			nil visual	No
			16/04/21	4/05/21	4/05/21	TDS	mg/L	No requirement	1	125				
		16/04/21	4/05/21	4/05/21	TSS	mg/L	No requirement	1	9					
		16/04/21	4/05/21	4/05/21	Salinity	ppt	No requirement	1	0.15					
		16/04/21	4/05/21	4/05/21				1						
May-21	Point 10 - Ambient air and weather monitoring station	12/06/21	14/06/21	NOx	ppb	Continuous	Continuous	0	5	44				
		12/06/21	14/06/21	O3	ppb	Continuous	Continuous	0	16	34				
	Point 11 - Air emissions monitoring	4/05/21	26/05/21	NOx	ppm	Continuous with limit of 2132 g/min	Continuous	< 2132 g/min			< 2132 g/min	No		
	Point 8 - First Flush Effluent quality monitoring		1/06/21	11/06/21	O&G	mg/L	Weekly during any discharge - no visible oil	13	nil			nil visual	No	
			1/06/21	11/06/21	pH		Weekly during any discharge	13	7.19	7.61	8.2	6.5-8.5	No	
			5/05/21	21/05/21	26/05/21	TSS	mg/L	No requirement	1	1				
			5/05/21	21/05/21	26/05/21	Salinity	ppt	No requirement	1	0.046				
			5/05/21	21/05/21	26/05/21	pH		Monthly	1	7.38			6.5-8.5	No
	Point 9 - Process Water Effluent quality monitoring		5/05/21	21/05/21	26/05/21	O&G	mg/L	Monthly	1	<5			nil visual	No
			5/05/21	21/05/21	26/05/21	TDS	mg/L	No requirement	1	173				
		5/05/21	21/05/21	26/05/21	TSS	mg/L	No requirement	1	5					
		5/05/21	21/05/21	26/05/21	Salinity	ppt	No requirement	1	0.204					
		5/05/21	21/05/21	26/05/21				1						

Note: Licence amended in January 2021 to include licence limits for pH and Oil and Grease

First flush was empty during sampling

Investigation conducted into increased pH of Process Water. Fouled probe identified as causing automatic dosing system to incorrectly dose. No environmental harm observed. Exceedance to be reported in the 2020-2021 Tower EPA Annual Return.

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Jun-21	Point 10 - Ambient air and weather monitoring station				NOx	ppb	Continuous	Continuous	0	6	32			
					O3	ppb	Continuous	Continuous	-1	15	28			
	Point 11 - Air emissions monitoring				NOx	ppm	Continuous with limit of 2132 g/min	Continuous	< 2132 g/min			< 2132 g/min	No	
			3/07/21	5/07/21	O&G	mg/L	Weekly during any discharge - no visible oil	10	nil visual			nil visual	No	
	Point 8 - First Flush Effluent quality monitoring		3/07/21	5/07/21	pH		Weekly during any discharge	10	7.1	7.55	8.1	6.5-8.5	No	
		4/06/21	22/06/21	24/06/21	TSS	mg/L	No requirement	1	2					
		4/06/21	22/06/21	24/06/21	Salinity	ppt	No requirement	1	0.185					
			3/07/21	5/07/21	pH		Monthly	12	7.3	7.39	7.61	6.5-8.5	No	
			3/07/21	5/07/21	O&G	mg/L	Monthly	32	nil visual			nil visual	No	
	Point 9 - Process Water Effluent quality monitoring		4/06/21	22/06/21	24/06/21	TDS	mg/L	No requirement	1	1020				
			4/06/21	22/06/21	24/06/21	TSS	mg/L	No requirement	1	12				
			4/06/21	22/06/21	24/06/21	Salinity	ppt	No requirement	1	1.15				
			4/06/21	22/06/21	24/06/21	Salinity	ppt	No requirement	1	1.15				