

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, oil and grease (O&G);
 Frequency: Spot sampling monthly for Process Water Effluent O&G, pH;
 Volume monitored daily for waste water discharges.

Month	Location of monitoring point	Sampled		Published	Pollutant	Units	Monitoring Frequency and Limit	Measurement during month	Min	Mean	Max	Licence Limit	Exceedance (Yes/No)		
		Obtained	Obtained												
Jul-21	Point 10 - Ambient air and weather monitoring station		12/08/21	18/08/21	NOx	ppb	Continuous	Continuous	0	6	99				
			12/08/21	18/08/21	O3	ppb	Continuous	Continuous	0	17	30				
	Point 11 - Air emissions monitoring		12/07/21	23/07/21	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous with limit of 2132 g/min	< 2132 g/min				< 2132 g/min	No	
		Point 8 - First Flush Effluent quality monitoring		1/07/21	1/07/21	O&G	mg/L	Weekly during any discharge - no visible oil	Weekly during any discharge - no visible oil	Nil				nil visual	
			1/07/21	1/07/21	pH		Weekly during any discharge	Weekly during any discharge	7.03	7.58	8.32		6.5-8.5	No	
	n.a		n.a	n.a	TSS	mg/L	No requirement	No requirement	n/a						
	n.a		n.a	n.a	Salinity	ppt	No requirement	No requirement	n/a						
	Point 9 - Process Water Effluent quality monitoring		23/07/21	26/07/21	pH		Monthly	Monthly	7.34				6.5-8.5	No	
			12/07/21	23/07/21	26/07/21	O&G	mg/L	Monthly	Monthly	<5			nil visual		
			12/07/21	23/07/21	26/07/21	TDS	mg/L	No requirement	No requirement	144					
			12/07/21	23/07/21	26/07/21	TSS	mg/L	No requirement	No requirement	7					
			12/07/21	23/07/21	26/07/21	Salinity	ppt	No requirement	No requirement	0.168					
Aug-21	Point 10 - Ambient air and weather monitoring station		11/09/21	13/09/21	NOx	ppb	Continuous	Continuous	0	6	99				
			11/09/21	13/09/21	O3	ppb	Continuous	Continuous	0	17	30				
	Point 11 - Air emissions monitoring		27/08/21	13/09/21	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min				< 2132 g/min	No	
		Point 8 - First Flush Effluent quality monitoring		6/09/21	10/09/21	O&G	mg/L	Weekly during any discharge - no visible oil	Weekly during any discharge - no visible oil	12				nil visual	
			6/09/21	10/09/21	pH		Weekly during any discharge	Weekly during any discharge	12	7.28	7.86	8.35		6.5-8.5	No
	n.a		n.a	n.a	TSS	mg/L	No requirement	No requirement	0						
	n.a		n.a	n.a	Salinity	ppt	No requirement	No requirement	0						
	Point 9 - Process Water Effluent quality monitoring		6/09/21	10/09/21	pH		Monthly	Monthly	7.94				6.5-8.5	No	
			4/08/21	19/08/21	25/08/21	O&G	mg/L	Monthly	Monthly	<5			nil visual		
			4/08/21	19/08/21	25/08/21	TDS	mg/L	No requirement	No requirement	131					
			4/08/21	19/08/21	25/08/21	TSS	mg/L	No requirement	No requirement	67					
			4/08/21	19/08/21	25/08/21	Salinity	ppt	No requirement	No requirement	0.156					
Sep-21	Point 10 - Ambient air and weather monitoring station		12/10/21	18/10/21	NOx	ppb	Continuous	Continuous	0	7	100				
			12/10/21	18/10/21	O3	ppb	Continuous	Continuous	2	22	44				
	Point 11 - Air emissions monitoring		25/10/21	1/11/21	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min				< 2132 g/min	No	
		Point 8 - First Flush Effluent quality monitoring		25/10/21	1/11/21	O&G	mg/L	Weekly during any discharge - no visible oil	Weekly during any discharge - no visible oil	11				nil visual	
			25/10/21	1/11/21	pH		Weekly during any discharge	Weekly during any discharge	11	7.18	7.72	8.3		6.5-8.5	No
	3/09/21		29/09/21	29/09/21	TSS	mg/L	No requirement	No requirement	0						
	3/09/21		29/09/21	29/09/21	Salinity	ppt	No requirement	No requirement	0						
	Point 9 - Process Water Effluent quality monitoring		25/10/21	1/11/21	pH		Monthly	Monthly	7.19				6.5-8.5	No	
			3/09/21	29/09/21	29/09/21	O&G	mg/L	Monthly	Monthly	<5			nil visual		
			3/09/21	29/09/21	29/09/21	TDS	mg/L	No requirement	No requirement	105					
			3/09/21	29/09/21	29/09/21	TSS	mg/L	No requirement	No requirement	12					
			3/09/21	29/09/21	29/09/21	Salinity	ppt	No requirement	No requirement	0.124					
Oct-21	Point 10 - Ambient air and weather monitoring station		17/11/21	18/11/21	NOx	ppb	Continuous	Continuous	0	5	59				
			17/11/21	18/11/21	O3	ppb	Continuous	Continuous	1	23	69				
	Point 11 - Air emissions monitoring		17/11/21	18/11/21	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min				< 2132 g/min	No	
		Point 8 - First Flush Effluent quality monitoring		6/11/21	12/11/21	O&G	mg/L	Weekly during any discharge - no visible oil	Weekly during any discharge - no visible oil	5				nil visual	
			6/11/21	12/11/21	pH		Weekly during any discharge	Weekly during any discharge	5	7.06	7.59	8.1		6.5-8.5	No
	n.a		n.a	n.a	TSS	mg/L	No requirement	No requirement	1						
	n.a		n.a	n.a	Salinity	ppt	No requirement	No requirement	1						
	Point 9 - Process Water Effluent quality monitoring		17/11/21	18/11/21	pH		Monthly	Monthly	7.26				6.5-8.5	No	
			8/10/22	25/10/21	1/11/21	O&G	mg/L	Monthly	Monthly	<5			nil visual		
			8/10/22	25/10/21	1/11/21	TDS	mg/L	No requirement	No requirement	1					
			8/10/22	25/10/21	1/11/21	TSS	mg/L	No requirement	No requirement	27					
			8/10/22	25/10/21	1/11/21	Salinity	ppt	No requirement	No requirement	1.37					
Nov-21	Point 10 - Ambient air and weather monitoring station		10/12/21	14/12/21	NOx	ppb	Continuous	Continuous	0	6	59				
			10/12/21	14/12/21	O3	ppb	Continuous	Continuous	3	19	48				
	Point 11 - Air emissions monitoring		10/12/21	14/12/21	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min				< 2132 g/min	No	
		Point 8 - First Flush Effluent quality monitoring		n.a	n.a	O&G	mg/L	Weekly during any discharge - no visible oil	Weekly during any discharge - no visible oil	15				nil visual	
			3/12/21	14/12/21	pH		Weekly during any discharge	Weekly during any discharge	15	6.85	7.58	8.33		6.5-8.5	No
	n.a		n.a	n.a	TSS	mg/L	No requirement	No requirement	1						
	n.a		n.a	n.a	Salinity	ppt	No requirement	No requirement	1						
	Point 9 - Process Water Effluent quality monitoring		3/12/21	14/12/21	pH		Monthly	Monthly	7.48				6.5-8.5	No	
			3/11/21	17/11/21	19/11/21	O&G	mg/L	Monthly	Monthly	<5			nil visual		
			3/11/21	17/11/21	19/11/21	TDS	mg/L	No requirement	No requirement	124					
			3/11/21	17/11/21	19/11/21	TSS	mg/L	No requirement	No requirement	13					
			3/11/21	17/11/21	19/11/21	Salinity	ppt	No requirement	No requirement	0.143					
Dec-21	Point 10 - Ambient air and weather monitoring station		12/01/22	31/01/22	NOx	ppb	Continuous	Continuous	0	7	78				
			12/01/22	31/01/22	O3	ppb	Continuous	Continuous	1	18	73				
	Point 11 - Air emissions monitoring		7/01/22	31/01/22	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	<2132 g/min				< 2132 g/min	No	
		Point 8 - First Flush Effluent quality monitoring		19/01/22	31/01/22	O&G	mg/L	Weekly during any discharge - no visible oil	Weekly during any discharge - no visible oil	12				nil visual	
			19/01/22	31/01/22	pH		Weekly during any discharge	Weekly during any discharge	12	7.02	7.34	7.99		6.5-8.5	No
	n.a		n.a	n.a	TSS	mg/L	No requirement	No requirement	1						
	n.a		n.a	n.a	Salinity	ppt	No requirement	No requirement	1						
	Point 9 - Process Water Effluent quality monitoring		19/01/22	31/01/22	pH		Monthly	Monthly	7.01				6.5-8.5	No	
			3/12/21	21/12/21	7/01/22	O&G	mg/L	Monthly	Monthly	<5			nil visual		
			3/12/21	21/12/21	7/01/22	TDS	mg/L	No requirement	No requirement	113					
			3/12/21	21/12/21	7/01/22	TSS	mg/L	No requirement	No requirement	7					
			3/12/21	21/12/21	7/01/22	Salinity	ppt	No requirement	No requirement	0.133					
Jan-22	Point 10 - Ambient air and weather monitoring station		12/01/22	31/01/22	NOx	ppb	Continuous	Continuous	0	7	78				
			12/01/22	31/01/22	O3	ppb	Continuous	Continuous	1	18	73				
	Point 11 - Air emissions monitoring		7/01/22	31/01/22	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	<2132 g/min				< 2132 g/min	No	
		Point 8 - First Flush Effluent quality monitoring		19/01/22	31/01/22	O&G	mg/L	Weekly during any discharge - no visible oil	Weekly during any discharge - no visible oil	12				nil visual	
			3/02/22	4/02/22	pH		Weekly during any discharge	Weekly during any discharge	14	7.11	7.65	8.22		6.5-8.5	No
	n.a		n.a	n.a	TSS	mg/L	No requirement	No requirement	0						
	n.a		n.a	n.a	Salinity	ppt	No requirement	No requirement	0						
	Point 9 - Process Water Effluent quality monitoring		3/02/22	4/02/22	pH		Monthly	Monthly	6.91				6.5-8.5	No	
			14/01/22	28/01/22	31/01/22	O&G	mg/L	Monthly	Monthly	<5			nil visual	No	
			14/01/22	28/01/22	31/01/22	TDS	mg/L	No requirement	No requirement	67					
			14/01/22	28/01/22	31/01/22	TSS	mg/L	No requirement	No requirement	9					
			14/01/22	28/01/22	31/01/22	Salinity	ppt	No requirement	No requirement	0.077					
Point 10 - Ambient air and weather monitoring station		11/03/22	14/03/22	NOx	ppb	Continuous	Continuous	0	9	61					

First flush was empty during sampling

MONITOR CHARACTERISTICS SUMMARY		11/03/22	14/03/22	O3	ppb	Continuous	Continuous	0	14	46					
Feb-22	Point 11 - Air emissions monitoring	11/03/22	14/03/22	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	<2878 g/min	< 2132 g/min			No			
	Point 8 - First Flush Effluent quality monitoring	4/03/22	10/03/22	O&G	mg/L	Weekly during any discharge - no visible oil	16	Nil	nil visual			No			
		3/03/22	10/03/22	pH		Weekly during any discharge	16	7.19	7.67	8.3	6.5-8.5		No		
		1/02/22	4/03/22	10/03/22	TSS	mg/L	No requirement	0	12						
		1/02/22	4/03/22	10/03/22	Salinity	ppt	No requirement	0	0.254						
	Point 9 - Process Water Effluent quality monitoring	4/03/22	10/03/22	pH		Monthly	1	6.99			6.5-8.5		No		
		1/02/22	4/03/22	10/03/22	O&G	mg/L	Monthly	1	<5			nil visual		No	
		1/02/22	4/03/22	10/03/22	TDS	mg/L	No requirement	1	192						
		1/02/22	4/03/22	10/03/22	TSS	mg/L	No requirement	1	11						
		1/02/22	4/03/22	10/03/22	Salinity	ppt	No requirement	1	0.228						
Mar-22	Point 10 - Ambient air and weather monitoring station	12/04/22	12/04/22	NOx	ppb	Continuous	Cont.	0	8	92					
		12/04/22	12/04/22	O3	ppb	Continuous	Cont.	0	14	54					
	Point 11 - Air emissions monitoring	12/04/22	12/04/22	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min	< 2132 g/min			No			
	Point 8 - First Flush Effluent quality monitoring	29/03/22	31/03/22	O&G	mg/L	Weekly during any discharge - no visible oil	19	Nil	nil visual			No			
		3/04/22	5/04/22	pH		Weekly during any discharge	19	6.96	7.49	8.2	6.5-8.5		No		
		1/03/22	29/03/22	31/03/22	TSS	mg/L	No requirement	0	2						
		1/03/22	29/03/22	31/03/22	Salinity	ppt	No requirement	0	0.059						
	Point 9 - Process Water Effluent quality monitoring	3/04/22	5/04/22	pH		Monthly	1	6.85			6.5-8.5		No		
		1/03/22	29/03/22	31/03/22	O&G	mg/L	Monthly	1	<5			nil visual		No	
		1/03/22	29/03/22	31/03/22	TDS	mg/L	No requirement	1	104						
1/03/22		29/03/22	31/03/22	TSS	mg/L	No requirement	1	8							
1/03/22		29/03/22	31/03/22	Salinity	ppt	No requirement	1	0.123							
Apr-22	Point 10 - Ambient air and weather monitoring station	12/05/22	16/05/22	NOx	ppb	Continuous	Cont.	0	6	74					
		12/05/22	16/05/22	O3	ppb	Continuous	Cont.	0	15	36					
	Point 11 - Air emissions monitoring	12/04/22	12/04/22	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min	< 2132 g/min			No			
	Point 8 - First Flush Effluent quality monitoring	5/05/22	16/05/22	O&G	mg/L	Weekly during any discharge - no visible oil	13	Nil	nil visual			No			
		3/05/22	16/05/22	pH		Weekly during any discharge	13	7.1	7.76	8.41	6.5-8.5		No		
		7/04/22	5/05/22	16/05/22	TSS	mg/L	No requirement	0	3						
		7/04/22	5/05/22	16/05/22	Salinity	ppt	No requirement	0	0.027						
	Point 9 - Process Water Effluent quality monitoring	3/05/22	16/05/22	pH		Monthly	1	6.62			6.5-8.5		No		
		7/04/22	5/05/22	16/05/22	O&G	mg/L	Monthly	1	<5			nil visual		No	
		7/04/22	5/05/22	16/05/22	TDS	mg/L	No requirement	1	105						
7/04/22		5/05/22	16/05/22	TSS	mg/L	No requirement	1	4							
7/04/22		5/05/22	16/05/22	Salinity	ppt	No requirement	1	0.121							
May-22	Point 10 - Ambient air and weather monitoring station	30/05/22	6/06/22	NOx	ppb	Continuous	Cont.	0	6	114					
		30/05/22	6/06/22	O3	ppb	Continuous	Cont.	-1	18	73					
	Point 11 - Air emissions monitoring	30/05/22	6/06/22	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min	< 2132 g/min			No			
	Point 8 - First Flush Effluent quality monitoring	6/06/22	6/06/22	O&G	mg/L	Weekly during any discharge - no visible oil	13	Nil	nil visual			No			
		3/06/22	6/06/22	pH		Weekly during any discharge	13	7.11	7.61	8.3	6.5-8.5		No		
		3/05/22	6/06/22	6/06/22	TSS	mg/L	No requirement	1	-						
		3/05/22	6/06/22	6/06/22	Salinity	ppt	No requirement	1	-						
	Point 9 - Process Water Effluent quality monitoring	3/05/22	6/06/22	6/06/22	pH	Monthly	1	9.54			6.5-8.5		Yes	Investigation conducted into increased pH of Process Water. Fouled probe identified as causing automatic dosing system to incorrectly dose. No environmental harm observed. ICAM investigation in progress. Exceedance to be reported in the 2022-2023 Tower EPA Annual Return.	
		3/05/22	6/06/22	15/06/22	O&G	mg/L	Monthly	1	<5			nil visual			No
		3/05/22	6/06/22	15/06/22	TDS	mg/L	No requirement	1	136						
3/05/22		6/06/22	15/06/22	TSS	mg/L	No requirement	1	8							
3/05/22		6/06/22	15/06/22	Salinity	ppt	No requirement	1	0.159							
Jun-22	Point 10 - Ambient air and weather monitoring station	12/07/22	19/07/22	NOx	ppb	Continuous	Cont.	0	6	64					
		12/07/22	19/07/22	O3	ppb	Continuous	Cont.	0	18	30					
	Point 11 - Air emissions monitoring	12/07/22	19/07/22	NOx	ppm	Continuous with limit of 2132 g/min (1hr rolling average)	Continuous	< 2132 g/min	< 2132 g/min			No			
	Point 8 - First Flush Effluent quality monitoring	27/06/22	7/07/22	O&G	mg/L	Weekly during any discharge - no visible oil	10	Nil	nil visual			No			
		3/07/22	7/07/22	pH		Weekly during any discharge	10	7.08	7.68	8.26	6.5-8.5		No		
		10/06/22	27/06/22	7/07/22	TSS	mg/L	No requirement	1	-						
		10/06/22	27/06/22	7/07/22	Salinity	ppt	No requirement	1	-						
	Point 9 - Process Water Effluent quality monitoring	10/06/22	27/06/22	7/07/22	pH	Monthly	12	7.03			6.5-8.5		No		
		10/06/22	27/06/22	7/07/22	O&G	mg/L	Monthly	32	<5			nil visual		No	
		10/06/22	27/06/22	7/07/22	TDS	mg/L	No requirement	1	141						
10/06/22		27/06/22	7/07/22	TSS	mg/L	No requirement	1	12							
10/06/22		27/06/22	7/07/22	Salinity	ppt	No requirement	1	0.166							

Change Log

Date: 15/06/2022
Change: Point 9 pH records amended to monthly laboratory results as required in EPL.