



Appin Power Station

Licence Number: 5482

Licence Holder: EDL CSM (NSW) PTY LTD

Licensee Address: Appin Coal Seam Methane Power Station
Northampton Dale Road Appin NSW 2560

Month: FY 2020-21

Frequency: 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 pH and oil and grease (O&G);
Spot sampling monthly for Septic Effluent biological oxygen demand (BOD), fecal coliforms (FC), O&G, total nitrogen (TN), TDS, total phosphorus (TP).

Month	Location of monitoring point	Sampled	Obtained	Published	Pollutant	Units	Monitoring frequency (licence)	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 13 - Air emissions monitoring		29/07/20	10/07/20	NOx	ppm measured as g/min	Continuous Max limit 2878 g/min	Continuous	< 2878 g/min			<2878g/min	No
	Point 11 - First Flush Effluent quality monitoring		4/09/20	9/09/20	O&G	mg/L	Weekly during discharge with No visible oil	8	Nil				
			4/09/20	9/09/20	pH		Weekly during any discharge	8	7.49	7.88	8.17		
		7/07/20	22/07/20	10/08/20	Salinity	ppt	Not required	1					
	Point 12 - Process Water Effluent quality monitoring	7/07/20	22/07/20	10/08/20	TSS	mg/L	Not required	1					
		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	pH		Monthly	1	7.21				
		7/07/20	22/07/20	10/08/20	Salinity	ppt	Not required	1	0.096				
		7/07/20	22/07/20	10/08/20	TDS	mg/L	Not required	1	83				
		7/07/20	22/07/20	10/08/20	TSS	mg/L	Not required	1	5				
	Point 16 - Septic waste water Effluent quality monitoring	7/07/20	22/07/20	10/08/20	BOD	mg/L	Monthly	1	11				
		7/07/20	22/07/20	10/08/20	FC	cfu/100mL	Monthly	1	< 10				
		7/07/20	22/07/20	10/08/20	O&G	mg/L	Monthly	1	< 3				
		7/07/20	22/07/20	10/08/20	TN	mg/L	Monthly	1	108				
7/07/20		22/07/20	10/08/20	TDS	mg/L	Monthly	1	451					
7/07/20		22/07/20	10/08/20	TSS	mg/L	Not required	1	42					
7/07/20	22/07/20	10/08/20	TP	mg/L	Monthly	1	10						
Aug-20	Point 10 - Ambient air and weather monitoring station		11/09/20	28/09/20	NOx	ppb	Continuous	Cont.	0	2	29		
			11/09/20	28/09/20	O3	ppb	Continuous	Cont.	-2	20	42		
	Point 13 - Air emissions monitoring		10/09/20	28/09/20	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	< 2878 g/min			<2878g/min	No
	Point 11 - First Flush Effluent quality monitoring		3/09/20	4/09/20	O&G	mg/L	Weekly during discharge with No visible oil	12	Nil				
			3/09/20	4/09/20	pH		Weekly during any discharge	12	7.45	8	7.95		
		5/08/20	1/09/20	2/09/20	Salinity	ppt	Not required	1	0.395				
	Point 12 - Process Water Effluent quality monitoring	5/08/20	1/09/20	2/09/20	TSS	mg/L	Not required	1	5				
		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	pH		Monthly	1	7.36				
		5/08/20	1/09/20	2/09/20	Salinity	ppt	Not required	1	0.111				
		5/08/20	1/09/20	2/09/20	TDS	mg/L	Not required	1	92				
		5/08/20	1/09/20	2/09/20	TSS	mg/L	Not required	1	3				
	Point 16 - Septic waste water Effluent quality monitoring	5/08/20	1/09/20	2/09/20	BOD	mg/L	Monthly	1	7				
		5/08/20	1/09/20	2/09/20	FC	cfu/100mL	Monthly	1	< 10				
		5/08/20	1/09/20	2/09/20	O&G	mg/L	Monthly	1	< 3				
		5/08/20	1/09/20	2/09/20	TN	mg/L	Monthly	1	46				
5/08/20		1/09/20	2/09/20	TDS	mg/L	Monthly	1	318					
5/08/20		1/09/20	2/09/20	TSS	mg/L	Not required	1	23					
5/08/20	1/09/20	2/09/20	TP	mg/L	Monthly	1	5.8						
Sep-20	Point 10 - Ambient air and weather monitoring station		12/10/20	16/10/20	NOx	ppb	Continuous	Cont.	-1	6	66		
			12/10/20	16/10/20	O3	ppb	Continuous	Cont.	2	21	46		
	Point 13 - Air emissions monitoring		15/10/20	16/10/20	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	< 2878 g/min			<2878g/min	No
	Point 11 - First Flush Effluent quality monitoring		15/10/20	16/10/20	O&G	mg/L	Weekly during discharge with No visible oil	5	Nil				
			15/10/20	16/10/20	pH		Weekly during any discharge	5	7.48	8.09	8.72		
		2/09/20	21/09/20	28/09/20	Salinity	ppt	Not required	1	0.334				
	Point 12 - Process Water Effluent quality monitoring	2/09/20	21/09/20	28/09/20	TSS	mg/L	Not required	1	5				
		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	pH		Monthly	1	7.44				
		2/09/20	21/09/20	28/09/20	Salinity	ppt	Not required	1	0.101				
		2/09/20	21/09/20	28/09/20	TDS	mg/L	Not required	1	85				
		2/09/20	21/09/20	28/09/20	TSS	mg/L	Not required	1	7				
	Point 16 - Septic waste water Effluent quality monitoring	2/09/20	21/09/20	28/09/20	BOD	mg/L	Monthly	1	<5				
		2/09/20	21/09/20	28/09/20	FC	cfu/100mL	Monthly	1	20				
		2/09/20	21/09/20	28/09/20	O&G	mg/L	Monthly	1	<3				
		2/09/20	21/09/20	28/09/20	TN	mg/L	Monthly	1	51				
2/09/20		21/09/20	28/09/20	TDS	mg/L	Monthly	1	348					
2/09/20		21/09/20	28/09/20	TSS	mg/L	Not required	1	27					
2/09/20	21/09/20	28/09/20	TP	mg/L	Monthly	1	8.5						

Receipt of report was delayed due to operational impacts

First flush was empty at time of testing

Month	Location of monitoring point	Sampled	Obtained	Published	Pollutant	Units	Monitoring frequency (licence)	Measurement during month	Min	Mean	Max	Licence limit	Exceedance (Yes/No)
Oct-20	Point 10 - Ambient air and weather monitoring station		12/11/20	18/11/20	NOx	ppb	Continuous	Cont.	1	8	76		
			11/21/20	18/11/20	O3	ppb	Continuous	Cont.	4	23	66		
	Point 13 - Air emissions monitoring		18/11/20	18/11/20	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	< 2878 g/min			<2878g/min	No
	Point 11 - First Flush Effluent quality monitoring		13/11/20	18/11/20	O&G	mg/L	Weekly during discharge with No visible oil	8	Nil				
			13/11/20	18/11/20	pH		Weekly during any discharge	8	8.01	8.23	8.4		
		8/10/20	6/11/20	18/11/20	Salinity	ppt	Not required	1	0.294				
	Point 12 - Process Water Effluent quality monitoring	8/10/20	6/11/20	18/11/20	TSS	mg/L	Not required	1	15				
		8/10/20	6/11/20	18/11/20	O&G	mg/L	Monthly	1	<5				
		8/10/20	6/11/20	18/11/20	pH		Monthly	1	7.34				
		8/10/20	6/11/20	18/11/20	Salinity	ppt	Not required	1	0.135				
		8/10/20	6/11/20	18/11/20	TDS	mg/L	Not required	1	133				
		8/10/20	6/11/20	18/11/20	TSS	mg/L	Not required	1	9				
	Point 16 - Septic waste water Effluent quality monitoring	8/10/20	6/11/20	18/11/20	BOD	mg/L	Monthly	1	<5				
		8/10/20	6/11/20	18/11/20	FC	cfu/100mL	Monthly	1	100				
		8/10/20	6/11/20	18/11/20	O&G	mg/L	Not required	1	<3				
		8/10/20	6/11/20	18/11/20	TN	mg/L	Monthly	1	55				
8/10/20		6/11/20	18/11/20	TDS	mg/L	Monthly	1	473					
8/10/20		6/11/20	18/11/20	TSS	mg/L	Not required	1	30					
8/10/20		6/11/20	18/11/20	TP	mg/L	Monthly	1	11					
		11/12/20	15/12/20	NOx	ppb	Continuous	Cont.	0	6	86			
Point 10 - Ambient air and weather monitoring station		11/12/20	15/12/20	O3	ppb	Continuous	Cont.	1	21	74			
Point 13 - Air emissions monitoring		16/12/20	16/12/20	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	< 2878 g/min			<2878g/min	No	
Point 11 - First Flush Effluent quality monitoring		4/12/20	16/12/20	O&G	mg/L	Weekly during discharge with No visible oil	3	Nil					
		4/12/20	16/12/20	pH		Weekly during any discharge	3	8.07	8.19	8.4			
	4/11/20	16/11/20	1/12/20	Salinity	ppt	Not required	1	0.195					
Point 12 - Process Water Effluent quality monitoring	4/11/20	16/11/20	1/12/20	TSS	mg/L	Not required	1	2					
	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	pH		Monthly	1	6.92					
	4/11/20	16/11/20	1/12/20	Salinity	ppt	Not required	1	0.357					
	4/11/20	16/11/20	1/12/20	TDS	mg/L	Not required	1	297					
	4/11/20	16/11/20	1/12/20	TSS	mg/L	Not required	1	18					
Point 16 - Septic waste water Effluent quality monitoring	4/11/20	16/11/20	1/12/20	BOD	mg/L	Monthly	1	<5					
	4/11/20	16/11/20	1/12/20	FC	cfu/100mL	Monthly	1	<10					
	4/11/20	16/11/20	1/12/20	O&G	mg/L	Monthly	1	<3					
	4/11/20	16/11/20	1/12/20	TN	mg/L	Monthly	1	54					
	4/11/20	16/11/20	1/12/20	TDS	mg/L	Monthly	1	348					
	4/11/20	16/11/20	1/12/20	TSS	mg/L	Not required	1	24					
	4/11/20	16/11/20	1/12/20	TP	mg/L	Monthly	1	4.6					
Dec-20	Point 10 - Ambient air and weather monitoring station		12/01/21	12/01/21	NOx	ppb	Continuous	Cont.	0	6	56		
			12/01/21	12/01/21	O3	ppb	Continuous	Cont.	1	17	60		
	Point 13 - Air emissions monitoring		8/01/21	12/01/21	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	<2878 g/min			<2878g/min	No
	Point 11 - First Flush Effluent quality monitoring		7/01/21	12/01/21	O&G	mg/L	Weekly during discharge with No visible oil	10	nil				
			7/01/21	12/01/21	pH		Weekly during any discharge	10	7.17	7.59	8.16		
		2/12/20	14/12/20	16/12/20	Salinity	ppt	Not required	1	0.343				
	Point 12 - Process Water Effluent quality monitoring	2/12/20	14/12/20	16/12/20	TSS	mg/L	Not required	1	4				
		2/12/20	14/12/20	16/12/20	O&G	mg/L	Monthly	1	<5				
		2/12/20	14/12/20	16/12/20	pH		Monthly	1	7.15				
		2/12/20	14/12/20	16/12/20	Salinity	ppt	Not required	1	0.126				
		2/12/20	14/12/20	16/12/20	TDS	mg/L	Not required	1	105				
		2/12/20	14/12/20	16/12/20	TSS	mg/L	Not required	1	5				
	Point 16 - Septic waste water Effluent quality monitoring	2/12/20	14/12/20	16/12/20	BOD	mg/L	Monthly	1	<5				
		2/12/20	14/12/20	16/12/20	FC	cfu/100mL	Monthly	1	<10				
		2/12/20	14/12/20	16/12/20	O&G	mg/L	Monthly	1	<3				
		2/12/20	14/12/20	16/12/20	TN	mg/L	Monthly	1	27				
2/12/20		14/12/20	16/12/20	TDS	mg/L	Monthly	1	352					
2/12/20		14/12/20	16/12/20	TSS	mg/L	Not required	1	55					
2/12/20		14/12/20	16/12/20	TP	mg/L	Monthly	1	7.4					
Jan-21	Point 10 - Ambient air and weather monitoring station		12/02/21	17/02/21	NOx	ppb	Continuous	Cont.	0	6	41		
			12/02/21	17/02/21	O3	ppb	Continuous	Cont.	0	19	92		
	Point 13 - Air emissions monitoring		17/02/21	17/02/21	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	<2878 g/min			<2878 g/min	No
	Point 11 - First Flush Effluent quality monitoring		16/02/21	17/02/21	O&G	mg/L	Weekly during discharge with No visible oil	5	Nil visual			nil visual	No
			16/02/21	17/02/21	pH		Weekly during any discharge	5	7.61	7.716	7.94	6.5-8.5	No
		15/01/21	2/02/21	17/02/21	Salinity	ppt	Not required	1	0.31				
	Point 12 - Process Water Effluent quality monitoring	15/01/21	2/02/21	17/02/21	TSS	mg/L	Not required	1	24				
		15/01/21	2/02/21	17/02/21	O&G	mg/L	Monthly	1	<5			nil visual	No
		15/01/21	2/02/21	17/02/21	pH		Monthly	1	7.34			6.5-8.5	No
		15/01/21	2/02/21	17/02/21	Salinity	ppt	Not required	1	0.177				
		15/01/21	2/02/21	17/02/21	TDS	mg/L	Not required	1	151				
		15/01/21	2/02/21	17/02/21	TSS	mg/L	Not required	1	6				
	Point 16 - Septic waste water Effluent quality monitoring	15/01/21	2/02/21	17/02/21	BOD	mg/L	Monthly	1	<5				
		15/01/21	2/02/21	17/02/21	FC	cfu/100mL	Monthly	1	<10				
		15/01/21	2/02/21	17/02/21	O&G	mg/L	Monthly	1	<3				
		15/01/21	2/02/21	17/02/21	TN	mg/L	Monthly	1	26				
15/01/21		2/02/21	17/02/21	TDS	mg/L	Monthly	1	311					
15/01/21		2/02/21	17/02/21	TSS	mg/L	Not required	1	49					
15/01/21		2/02/21	17/02/21	TP	mg/L	Monthly	1	4.7					

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

Month	Location of monitoring point	Sampled	Obtained	Published	Pollutant	Units	Monitoring frequency (licence)	Measurement during month	Min	Mean	Max	Licence limit	Exceedance (Yes/No)
Feb-21	Point 10 - Ambient air and weather monitoring station		12/03/21	15/03/21	NOx	ppb	Continuous	Cont.	0	6	49		
			12/03/21	15/03/21	O3	ppb	Continuous	Cont.	1	15	57		
	Point 13 - Air emissions monitoring		26/02/21	15/03/21	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	<2878 g/min			<2878 g/min	No
	Point 11 - First Flush Effluent quality monitoring		12/03/21	15/03/21	O&G	mg/L	Weekly during discharge with No visible oil	10	Nil visual			nil visual	No
			12/03/21	15/03/21	pH		Weekly during any discharge	10	7.10	7.34	7.6	6.5-8.5	No
		3/02/21	17/02/21	1/03/21	Salinity	ppt	Not required	1	0.11				
	Point 12 - Process Water Effluent quality monitoring	3/02/21	17/02/21	1/03/21	TSS	mg/L	Not required	1	1				
		3/02/21	17/02/21	1/03/21	O&G	mg/L	Monthly	1	<5			nil visual	No
		3/02/21	17/02/21	1/03/21	pH		Monthly	1	7.25			6.5-8.5	No
		3/02/21	17/02/21	1/03/21	Salinity	ppt	Not required	1	0.167				
		3/02/21	17/02/21	1/03/21	TDS	mg/L	Not required	1	140				
		3/02/21	17/02/21	1/03/21	TSS	mg/L	Not required	1	9				
		3/02/21	17/02/21	1/03/21	BOD	mg/L	Monthly	1	<5				
	Point 16 - Septic waste water Effluent quality monitoring	3/02/21	17/02/21	1/03/21	FC	cfu/100mL	Monthly	1	<1				
		3/02/21	17/02/21	1/03/21	O&G	mg/L	Monthly	1	<3				
		3/02/21	17/02/21	1/03/21	TN	mg/L	Monthly	1	7.7				
3/02/21		17/02/21	1/03/21	TDS	mg/L	Monthly	1	228					
3/02/21		17/02/21	1/03/21	TSS	mg/L	Not required	1	11					
3/02/21		17/02/21	1/03/21	TP	mg/L	Monthly	1	5.3					
Mar-21	Point 10 - Ambient air and weather monitoring station		12/04/21	13/04/21	NOx	ppb	Continuous	Cont.	0	5	56		
			12/04/21	13/04/21	O3	ppb	Continuous	Cont.	0	17	45		
	Point 13 - Air emissions monitoring		7/04/21	7/04/21	NOx	ppm	Continuous Max limit 2878 g/min	Cont.	<2878 g/min			<2878 g/min	No
	Point 11 - First Flush Effluent quality monitoring		7/04/21	13/04/21	O&G	mg/L	Weekly during discharge with No visible oil	10	nil			nil visual	No
			7/04/21	13/04/21	pH		Weekly during any discharge	10	7.06	7.47	8.07	6.5-8.5	No
		3/03/21	19/03/21	7/04/21	Salinity	ppt	Not required	-	-				
	Point 12 - Process Water Effluent quality monitoring	3/03/21	19/03/21	7/04/21	TSS	mg/L	Not required	-	-				
		3/03/21	19/03/21	7/04/21	O&G	mg/L	Monthly	1	<5			nil visual	No
		3/03/21	19/03/21	7/04/21	pH		Monthly	1	7.41			6.5-8.5	No
		3/03/21	19/03/21	7/04/21	Salinity	ppt	Not required	1	0.221				
		3/03/21	19/03/21	7/04/21	TDS	mg/L	Not required	1	191				
		3/03/21	19/03/21	7/04/21	TSS	mg/L	Not required	1	7				
		3/03/21	19/03/21	7/04/21	BOD	mg/L	Monthly	1	<5				
	Point 16 - Septic waste water Effluent quality monitoring	3/03/21	19/03/21	7/04/21	FC	cfu/100mL	Monthly	1	<10				
		3/03/21	19/03/21	7/04/21	O&G	mg/L	Monthly	1	<3				
		3/03/21	19/03/21	7/04/21	TN	mg/L	Monthly	1	44				
3/03/21		19/03/21	7/04/21	TDS	mg/L	Monthly	1	301					
3/03/21		19/03/21	7/04/21	TSS	mg/L	Not required	1	16					
3/03/21		19/03/21	7/04/21	TP	mg/L	Monthly	1	6					

First flush was empty at time of testing