



Start Of Month	EndDate
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Monthly Data Summary
AGL Macquarie - Liddell Power Station
Environmental Protection License: EPL2122

EPA Monitoring Point 3



Combined air emissions from boiler 1 via Points 7 and 8 to Point 1 marked and shown as EPL Monitors ID No. 3 on The Plans

Pollutant	Unit of measure	Sampling Frequency	Sampling Performance	Lowest value	Mean values	Highest value	100th percentile concentration limits
NOx	mg/m3	Continuous when generating	90.00%	176.24	649.97	785.38	1500 mg/m3
SO2	mg/m3	Continuous when generating	90.00%	632.74	1019.77	1280.00	1900 mg/m3

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Pollutant	Unit of measure	Sampling Frequency	Date of Sample	Most recent result	100th percentile concentration limits
Cadmium	mg/m3	Every 6 months	21/02/2023	0.00015	0.2 mg/m3
Chlorine	mg/m3	Every 6 months	24/03/2022	0.00650	20 mg/m3
Fluorine	mg/m3	Every 6 months	24/03/2022	10.00000	30 mg/m3
Hydrogen Chloride	mg/m3	Every 6 months	24/03/2022	15.00000	50 mg/m3
Mercury	mg/m3	Every 6 months	21/02/2023	0.00360	0.05 mg/m3
Solid Particles	mg/m3	Quarterly	21/02/2023	11.00000	50 mg/m3
Sulfur Trioxide and/or Sulfuric Acid as SO3	mg/m3	Every 6 months	04/05/2022	1.50000	100 mg/m3
Type 1&2 Substances	mg/m3	Every 6 months	21/02/2023	0.02000	0.75 mg/m3
Volatile Organic Compounds	mg/m3	Every 6 months	24/03/2022	0.02500	10 mg/m3

EPA Monitoring Point 4



Combined air emissions from boiler 1 via Points 9 and 10 to Point 1 marked and shown as EPL Monitors ID No. 3 on The Plans

Pollutant	Unit of measure	Sampling Frequency	Sampling Performance	Lowest value	Mean values	Highest value	100th percentile concentration limits
SO2	mg/m3	Continuous when generating	69.87%	656.65	897.04	1231.72	1900 mg/m3
NOx	mg/m3	Continuous when generating	69.87%	115.79	420.11	518.80	1500 mg/m3

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Pollutant	Unit of measure	Sampling Frequency	Date of Sample	Most recent result	100th percentile concentration limits
Cadmium	mg/m3	Every 6 months	16/02/2023	0.00010	0.2 mg/m3
Chlorine	mg/m3	Every 6 months	03/02/2022	0.01400	20 mg/m3
Fluorine	mg/m3	Every 6 months	03/02/2022	12.00000	30 mg/m3
Hydrogen Chloride	mg/m3	Every 6 months	03/02/2022	16.00000	50 mg/m3
Mercury	mg/m3	Every 6 months	16/02/2023	0.00250	0.05 mg/m3
Solid Particles	mg/m3	Quarterly	16/02/2023	4.40000	50 mg/m3
Sulfur Trioxide and/or Sulfuric Acid as SO3	mg/m3	Every 6 months	03/05/2022	0.65000	100 mg/m3
Type 1&2 Substances	mg/m3	Every 6 months	16/02/2023	0.01000	0.75 mg/m3
Volatile Organic Compounds	mg/m3	Every 6 months	03/02/2022	0.17412	10 mg/m3

EPA Monitoring Point 6



Combined air emissions from boiler 1 via Points 13 and 14 to Point 1 marked and shown as EPL Monitors ID No. 3 on The Plans

Pollutant	Unit of measure	Sampling Frequency	Sampling Performance	Lowest value	Mean values	Highest value	100th percentile concentration limits
NOx	mg/m3	Continuous when generating	76.39%	266.52	450.28	562.00	1500 mg/m3
SO2	mg/m3	Continuous when generating	81.99%	748.36	1053.63	1233.33	1900 mg/m3

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Pollutant	Unit of measure	Sampling Frequency	Date of Sample	Most recent result	100th percentile concentration limits
Cadmium	mg/m3	Every 6 months	23/02/2023	0.00015	0.2 mg/m3
Chlorine	mg/m3	Every 6 months	01/02/2022	0.01500	20 mg/m3
Fluorine	mg/m3	Every 6 months	01/02/2022	9.10000	30 mg/m3
Hydrogen Chloride	mg/m3	Every 6 months	01/02/2022	13.00000	50 mg/m3
Mercury	mg/m3	Every 6 months	23/02/2023	0.00540	0.05 mg/m3
Solid Particles	mg/m3	Quarterly	23/02/2023	6.70000	50 mg/m3
Sulfur Trioxide and/or Sulfuric Acid as SO3	mg/m3	Every 6 months	03/05/2022	1.10000	100 mg/m3
Type 1&2 Substances	mg/m3	Every 6 months	23/02/2023	0.01500	0.75 mg/m3
Volatile Organic Compounds	mg/m3	Every 6 months	01/02/2022	0.86441	10 mg/m3

EPA Monitoring Point 7



Boiler number 1 exhaust - duct A marked and shown as EPL Monitors ID No. 7 on The Plans

Pollutant	Unit of measure	Sampling Frequency	Sampling Performance	Lowest value	Mean values	Highest value
SO2	mg/m3	Continuous when generating	90.00%	632.74	1019.78	1280.00
NOx	mg/m3	Continuous when generating	90.00%	176.24	649.97	785.38

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Date of Sample	Most recent result
Cadmium	mg/m3	Yearly	2	24/03/2022	0.00015
Chlorine	mg/m3	Yearly	2	24/03/2022	0.00650
Flow rate	m3/s	Yearly	5	04/05/2022	204.47190
Fluorine	mg/m3	Yearly	2	24/03/2022	10.00000
Hydrogen Chloride	mg/m3	Yearly	2	24/03/2022	15.00000
Mercury	mg/m3	Yearly	2	24/03/2022	0.00020
Moisture	%	Yearly	5	04/05/2022	6.40000
Oxygen	%	Yearly	5	04/05/2022	11.00000
Solid Particles	mg/m3	Yearly	3	04/05/2022	13.00000
Sulfur Trioxide and/or Sulfuric Acid as SO3	mg/m3	Yearly	1	04/05/2022	1.50000
Temperature	degC	Yearly	5	04/05/2022	152.61900
Type 1&2 Substances	mg/m3	Yearly	2	24/03/2022	0.01400
Volatile Organic Compounds	mg/m3	Yearly	2	24/03/2022	0.02500

EPA Monitoring Point 8



Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Date of Sample	Most recent result
Cadmium	mg/m3	Yearly	2	23/03/2022	0.00010
Flow rate	m3/s	Yearly	3	04/05/2022	250.37980
Mercury	mg/m3	Yearly	2	23/03/2022	0.00010
Moisture	%	Yearly	3	04/05/2022	7.50000
Oxygen	%	Yearly	3	04/05/2022	9.00000
Solid Particles	mg/m3	Yearly	3	04/05/2022	3.20000
Temperature	degC	Yearly	3	04/05/2022	135.00000
Type 1&2 Substances	mg/m3	Yearly	2	23/03/2022	0.01150

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

EPA Monitoring Point 9

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Date of Sample	Most recent result
Cadmium	mg/m3	Yearly	2	03/02/2022	0.00015
Flow rate	m3/s	Yearly	7	03/05/2022	266.61720
Mercury	mg/m3	Yearly	2	03/02/2022	0.00290
Moisture	%	Yearly	7	03/05/2022	5.30000
Oxygen	%	Yearly	7	03/05/2022	12.00000
Solid Particles	mg/m3	Yearly	5	03/05/2022	38.00000
Temperature	degC	Yearly	7	03/05/2022	133.86900
Type 1&2 Substances	mg/m3	Yearly	2	03/02/2022	0.02450



Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

EPA Monitoring Point 10



Boiler number 2 exhaust - duct B marked and shown as EPL Monitors ID No. 10 on The Plans

Pollutant	Unit of measure	Sampling Frequency	Sampling Performance	Lowest value	Mean values	Highest value
NOx	mg/m3	Continuous when generating	69.87%	115.79	420.11	518.80
SO2	mg/m3	Continuous when generating	69.87%	656.65	897.08	1231.72

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Date of Sample	Most recent result
Cadmium	mg/m3	Yearly	2	03/02/2022	0.00015
Chlorine	mg/m3	Yearly	2	03/02/2022	0.01400
Flow rate	m3/s	Yearly	9	03/05/2022	231.57980
Fluorine	mg/m3	Yearly	2	03/02/2022	12.00000
Hydrogen Chloride	mg/m3	Yearly	2	03/02/2022	16.00000
Mercury	mg/m3	Yearly	2	03/02/2022	0.00160
Moisture	%	Yearly	9	03/05/2022	5.00000
Oxygen	%	Yearly	9	03/05/2022	11.00000
Solid Particles	mg/m3	Yearly	5	03/05/2022	19.00000
Sulfur Trioxide and/or Sulfuric Acid as SO3	mg/m3	Yearly	3	03/05/2022	0.65000
Temperature	degC	Yearly	9	03/05/2022	121.54760
Type 1&2 Substances	mg/m3	Yearly	2	03/02/2022	0.01700
Volatile Organic Compounds	mg/m3	Yearly	2	03/02/2022	0.17412

EPA Monitoring Point 13



Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Date of Sample	Most recent result
Cadmium	mg/m3	Yearly	2	01/02/2022	0.00039
Flow rate	m3/s	Yearly	3	03/05/2022	209.91580
Mercury	mg/m3	Yearly	2	01/02/2022	0.00480
Moisture	%	Yearly	3	03/05/2022	5.90000
Oxygen	%	Yearly	3	03/05/2022	8.80000
Solid Particles	mg/m3	Yearly	3	03/05/2022	7.40000
Sulfur Trioxide and/or Sulfuric Acid as SO3	mg/m3	Yearly			
Temperature	degC	Yearly	3	03/05/2022	133.30950
Type 1&2 Substances	mg/m3	Yearly	2	01/02/2022	0.02050

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

EPA Monitoring Point 14



Boiler number 4 exhaust - duct B marked and shown as EPL Monitors ID No. 14 on The Plans

Pollutant	Unit of measure	Sampling Frequency	Sampling Performance	Year last measurement	Lowest value	Mean values	Highest value
NOx	mg/m3	Continuous when generating	76.39%	266.52330	266.52	450.10	562.00
SO2	mg/m3	Continuous when generating	76.39%	748.36220	748.36	1053.28	1233.33

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Date of Sample	Most recent result
Cadmium	mg/m3	Yearly	2	01/02/2022	0.00015
Chlorine	mg/m3	Yearly	2	01/02/2022	0.01500
Flow rate	m3/s	Yearly	5	03/05/2022	195.97940
Fluorine	mg/m3	Yearly	2	01/02/2022	9.10000
Hydrogen Chloride	mg/m3	Yearly	2	01/02/2022	13.00000
Mercury	mg/m3	Yearly	2	01/02/2022	0.00210
Moisture	%	Yearly	5	03/05/2022	5.70000
Oxygen	%	Yearly	5	03/05/2022	9.30000
Solid Particles	mg/m3	Yearly	3	03/05/2022	1.70000
Sulfur Trioxide and/or Sulfuric Acid as SO3	mg/m3	Yearly	1	03/05/2022	1.10000
Temperature	degC	Yearly	5	03/05/2022	127.69050
Type 1&2 Substances	mg/m3	Yearly	2	01/02/2022	0.00950
Volatile Organic Compounds	mg/m3	Yearly	2	01/02/2022	0.86441

EPA Monitoring Point 16



Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Discharge of cooling water from the cooling water outlet canal to Lake Liddell marked and shown as EPL Monitors ID. 16 on The Plans

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Lowest sample value	Mean value	Highest value
Ammonia	mg/L	Fortnightly	2	0.06	0.07	0.08
Anionic Surfactants	mg/L	Fortnightly	2	0.05	0.05	0.05
Antimony	mg/L	Fortnightly	2	0.01	0.01	0.01
Arsenic	mg/L	Fortnightly	2	0.01	0.01	0.01
Barium	mg/L	Fortnightly	2	0.09	0.10	0.10
Beryllium	mg/L	Fortnightly	2	0.00	0.00	0.00
Boron	mg/L	Fortnightly	2	1.16	1.27	1.38
Cadmium	mg/L	Fortnightly	2	0.00	0.00	0.00
Chlorine	mg/L	Fortnightly	2	0.04	0.04	0.04
Chromium III	mg/L	Fortnightly	2	0.01	0.01	0.01
Chromium VI	mg/L	Fortnightly	2	0.01	0.01	0.01
Cobalt	mg/L	Fortnightly	2	0.00	0.00	0.00
Conductivity	uS/cm	Fortnightly	4	2650.00	2707.50	2780.00
Copper	mg/L	Fortnightly	2	0.00	0.00	0.00
Fluoride	mg/L	Fortnightly	2	1.44	1.64	1.84
Lead	mg/L	Fortnightly	2	0.00	0.00	0.00
Manganese	mg/L	Fortnightly	2	0.01	0.02	0.02
Mercury	mg/L	Fortnightly	2	0.00	0.00	0.00
Molybdenum	mg/L	Fortnightly	2	0.12	0.12	0.12
Nickel	mg/L	Fortnightly	2	0.00	0.00	0.00
Nitrogen	mg/L	Fortnightly	2	0.60	0.60	0.60
Oil and Grease	mg/L	Weekly during any discharge	4	1.00	1.00	1.00
pH	pH units	Daily	30	8.40	8.56	8.79
Phosphorus	mg/L	Fortnightly	2	0.05	0.06	0.06
Selenium	mg/L	Fortnightly	2	0.01	0.01	0.01
Sulfur	mg/L	Fortnightly	2	640.00	710.00	780.00
Suspended Solids	mg/L	Fortnightly	2	2.50	2.50	2.50
Temperature	degC	Fortnightly	4	26.10	28.15	29.30
Tin	mg/L	Fortnightly	2	0.00	0.00	0.00
Total Dissolved Solids	mg/L	Fortnightly	2	1800.00	1835.00	1870.00
Total Organic Carbon	mg/L	Fortnightly	2	8.00	8.00	8.00
Vanadium	mg/L	Fortnightly	2	0.01	0.02	0.02
Zinc	mg/L	Fortnightly	2	0.00	0.00	0.00

EPA Monitoring Point 17



Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Discharge from oil and grit trap weir overflow to Lake Liddell marked and shown as EPL Monitors ID. 17 on The Plans

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Lowest sample value	Mean value	Highest value
Ammonia	mg/L	Fortnightly	2	0.02	0.06	0.10
Anionic Surfactants	mg/L	Fortnightly	2	0.05	0.05	0.05
Antimony	mg/L	Fortnightly	2	0.01	0.01	0.01
Arsenic	mg/L	Fortnightly	2	0.01	0.01	0.01
Barium	mg/L	Fortnightly	2	0.08	0.09	0.10
Beryllium	mg/L	Fortnightly	2	0.00	0.00	0.00
Boron	mg/L	Fortnightly	2	1.10	1.16	1.22
Cadmium	mg/L	Fortnightly	2	0.00	0.00	0.00
Chlorine	mg/L	Fortnightly	2	0.03	0.05	0.07
Chromium III	mg/L	Fortnightly	2	0.01	0.01	0.01
Chromium VI	mg/L	Fortnightly	2	0.01	0.01	0.01
Cobalt	mg/L	Fortnightly	2	0.00	0.00	0.00
Conductivity	uS/cm	Fortnightly	4	2510.00	2562.50	2600.00
Copper	mg/L	Fortnightly	2	0.00	0.00	0.00
Fluoride	mg/L	Fortnightly	2	1.23	1.37	1.50
Lead	mg/L	Fortnightly	2	0.00	0.00	0.00
Manganese	mg/L	Fortnightly	2	0.01	0.02	0.02
Mercury	mg/L	Fortnightly	2	0.00	0.00	0.00
Molybdenum	mg/L	Fortnightly	2	0.10	0.11	0.11
Nickel	mg/L	Fortnightly	2	0.00	0.00	0.00
Nitrogen	mg/L	Fortnightly	2	0.60	0.90	1.20
Oil and Grease	mg/L	Weekly during any discharge	4	1.00	1.00	1.00
pH	pH units	Daily during any discharge	30	8.32	8.44	8.60
Phosphorus	mg/L	Fortnightly	2	0.07	0.08	0.09
Selenium	mg/L	Fortnightly	2	0.01	0.01	0.01
Sulfur	mg/L	Fortnightly	2	600.00	640.00	680.00
Suspended Solids	mg/L	Fortnightly	2	2.50	2.50	2.50
Temperature	degC	Fortnightly	4	23.20	24.25	25.10
Tin	mg/L	Fortnightly	2	0.00	0.00	0.00
Total Dissolved Solids	mg/L	Fortnightly	2	1720.00	1730.00	1740.00
Total Organic Carbon	mg/L	Fortnightly	2	8.00	8.00	8.00
Vanadium	mg/L	Fortnightly	2	0.01	0.01	0.01
Zinc	mg/L	Fortnightly	2	0.01	0.01	0.01

EPA Monitoring Point 18



Discharge from skimmer dam overflow spillway (located at the left abutment of the skimmer dam) to Lake Liddell marked and shown as EPL Monitors ID. 18 on The Plans

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Lowest sample value	Mean value	Highest value
Arsenic	mg/L	Fortnightly	4	0.05	0.06	0.07
Boron	mg/L	Fortnightly	4	1.44	1.66	1.85
Cadmium	mg/L	Fortnightly	4	0.00	0.00	0.00
Chromium III	mg/L	Fortnightly	4	0.01	0.01	0.01
Chromium VI	mg/L	Fortnightly	4	0.01	0.01	0.01
Conductivity	uS/cm	Fortnightly	4	2770.00	2792.50	2830.00
Copper	mg/L	Fortnightly	4	0.00	0.00	0.00
Fluoride	mg/L	Fortnightly	4	2.00	2.20	2.40
Lead	mg/L	Fortnightly	4	0.00	0.00	0.00
Mercury	mg/L	Fortnightly	4	0.00	0.00	0.00
Oil and Grease	mg/L	Fortnightly	4	1.00	1.00	1.00
pH	pH units	Fortnightly	4	8.20	8.25	8.30
Selenium	mg/L	Fortnightly	4	0.02	0.02	0.03
Suspended Solids	mg/L	Fortnightly	4	7.00	8.00	10.00
Volume	ML/d	Daily	31	115.92	137.72	159.56
Zinc	mg/L	Fortnightly	4	0.00	0.00	0.00

EPA Monitoring Point 19



Discharge of effluent from the final pond of the onsite sewage treatment system adjacent to utilisation area marked and shown as EPL Monitors ID. 19 on The Plans

Pollutant	Unit of measure	Sampling Frequency	No. samples collected	Lowest sample value	Mean value	Highest value
Volume	kL/d	Daily	31	0.40	49.99	174.49

Start Of Month	End Of Month
01-Apr-23 12:00:00 AM	01-May-23 12:00:00 AM

Details of Non-Compliance with Licence Conditions	Start Time	Summary of particulars of the non-compliance (NO MORE THAN 50 WORDS)	If required, further details on particulars of non-compliance	Date(s) when the non-compliance occurred, if applicable	Cause of non-compliance	Mitigation	Action taken or that will be taken to prevent a recurrence of the non-compliance
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No incidents for the last month