Environmental Monitoring Data – Introduction

Thank you for taking a look at Elgas' environmental monitoring data. Our licensed facilities are located in Port Botany and Arndell Park, NSW. Elgas Ltd is owned by BOC Gases Australia, which makes Elgas a member of The Linde Group. Our plants are located at:

- Elgas Sydney LPG Cavern: 30 Friendship Road Port Botany NSW 2036
- Elgas Arndell Park: 22 Holbeche Road Arndell Park NSW 2148

The Elgas Sydney Cavern is licenced with the Environment Protection Authority (EPA) under licence number 10698, and Elgas Arndell Park is licensed under number 20023. If you would like to view our full licences, please follow the EPA links below.

Elgas Port Botany EPL 10698:
http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=31712&SYSUID=1&LICID=10698

Elgas Arndell Park EPL 20023:
http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=30718&SYSUID=1&LICID=20023

Based on requirements set out in the EPL, our Elgas Port Botany site is to monitor the following:

- Water Quality at Monitoring Point 4 monthly;
- Total water flow volume monitoring at Point 3 annually; and
- Water Quality and Discharge Volume at Monitoring Point 2 during an overflow event, if this occurs.

Based on requirements set out in the EPL, our Elgas Arndell Park does not have monitoring required to be published.

Environmental Monitoring Data – Elgas Port Botany

The following table summarises when Elgas Port Botany expects our next set of monitoring data for each emission type. Figure 1 provides a reference to the position of each of the emission monitoring points.

Table 1: Expected Future Monitoring Data Sets

Published: **Licensee: Elgas Port Botany** **EPL no.: 10698**			
EPA I.D. number	**Emission Monitoring Required**	**Description of the Location**	**Expected date(s) to post next set of monitoring data**
Point 1	Discharge to utilisation area	Effluent Utilisation Area	Not required in the licence
Point 2	Discharge Flow and Water Quality Monitoring	Aeration pond overflow	When an overflow event occurs.
Point 3	Total Volume Flow Monitoring	Water Stripper flow meter	Figure is to be reported annually, in line with the EPL anniversary.
Point 4	Water Quality Monitoring	Monitoring in the site's ponds before irrigation	Sample is taken at end of each month. The sample data results will be published at the end of the following month, within 14 days of the receipt of the result(s) in line with EPA legislation.



Figure 1:EPL Emission Monitoring Points (Image courtesy of Google Maps 2012)

When monitoring is published it will appear in tables similar to that shown in Tables 2, 3, and 4.

Table 2: Point 3 Total Volume Flow Monitoring

Licensee: Elgas Port Botany **EPL no.: 10698**			
EPA Identification Number: Point 3 **Qualifications related to volume monitoring** There are no volume discharge limits for the analytes listed below.			
Date Published	**Measurement Period and Monitoring Frequency Required by Licence**	**Units of Measure**	**Value**
		kL	

Units: kL: kilolitre

Table 3: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany **EPL no.: 10698**															
EPA Identification Number: Point 4 There are no EPL concentration limits for the analytes listed below. **Monitoring Frequency:** Monthly as required by EPL.															
Test due date	**Actual test date**	**Date Analysis Obtained**	**Date Published**	**Ammonia**	**BOD**	**Conductivity**	**Nitrate**	**Oil & Grease**	**PAH**	**TOC**	**TPH (C_6-C_{36})**	**Suspended solids**	**Turbidity**	**VOC (C_1-C_5)**	**pH**
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 4: Point 2 Water Quality Monitoring Data

Test due date	Actual test date	Date Analysis Obtained	Date Published	BOD	Oil & Grease	Suspended solids	Turbidity	pH
Units				**mg/L**	**mg/L**	**mg/L**	**NTU**	**pH**

	Pollutant	BOD	Oil & Grease	Suspended Solids	Turbidity	pH
	Units of measure	**mg/L**	**mg/L**	**mg/L**	**NTU**	**pH**
Year to date	**Minimum value**					
	Mean value					
	Maximum value					
EPL 100 Percentile Concentration Limit		20	10	50	10	6.5 – 8.5

Definitions: BOD: Biochemical Oxygen Demand
Units: mg/L: milligrams per litre; µg/L; NTU: Nephelometric Turbidity Unit

Environmental Monitoring Data to Date – Elgas Port Botany

The following tables show the monitoring data collected as part of Elgas Port Botany's sites from March 2012 as required.

Table 2: Point 3 Total Volume Flow Monitoring

Licensee: Elgas Port Botany **EPL no.: 10698**			
EPA Identification Number: Point 3 **Qualifications related to volume monitoring** There are no volume discharge limits for the analytes listed below.			
Date Published	**Measurement Period and Monitoring Frequency Required by Licence**	**Units of Measure**	**Value**
1 July 2012	1 June 2011 – 31 May 2012 Annual reporting	kL	28,911.55
29 July 2013	1 June 2012 – 31 May 2013 Annual Reporting	kL	27,789.09
15 July 2014	1 June 2013 – 31 May 2014 Annual Reporting	kL	24,874.66
7 July 2015	1 June 2014 – 31 May 2015 Annual Reporting	kL	24,850.02
30 June 2016	1 June 2015 – 31 May 2016 Annual Reporting	kL	22,686.64
9 June 2017	1 June 2016 – 31 May 2017 Annual Reporting	kL	21,359.54
15 June 2018	1 June 2017 – 31 May 2018 Annual Reporting	kL	17,945.74
14 June 2019	1 June 2018 – 31 May 2019 Annual Reporting	kL	14,652.65
17 June 2020	1 June 2019 – 31 May 2020 Annual Reporting	kL	14,213.10
1 July 2021	1 June 2020 – 31 May 2021 Annual Reporting	kL	13,072.40
7 July 2022	1 June 2021 – 31 May 2022 Annual Reporting	kL	16,275.61
3 July 2023	1 June 2022 – 31 May 2023 Annual Reporting	kL	15,656.83
1 July 2024	1 June 2023 – 31 May 2024 Annual Reporting	kL	16,788.38
16 June 2025	1 June 2024 – 31 May 2025 Annual Reporting	kL	24,259.00
20 July 2026	1 June 2025 – 31 May 2026 Annual Reporting	kL	20834.67

Units: kL : kilolitre

The following table shows the monthly water quality monitoring data at Point 4 in a meaningful summary table from March 2012 onwards. The obtained data can be requested from Elgas in written form.

Table 3: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Mar 12	30/03/12	13/04/12	01/07/12	0.8	90	4,100	<1	<5	<15.5	39	<0.220	4	11	250	7.6
End Apr 12	24/04/12	09/05/12	01/07/12	0.9	20	4,300	<1	<5	<15.5	9	<0.220	<2	0.80	39	7.8
End May 12	31/05/12	14/06/12	01/07/12	1.1	4	4,100	<1	<5	<15.5	3	<0.220	9	24	20	7.8
End Jun 12	28/06/12	06/07/12	31/07/12	1.2	3	4,100	<1	<5	<15.5	2	<0.220	4	9.3	19	7.9
End Jul 12	31/07/12	09/08/12	15/08/12	1.0	5	3,900	<1	<5	<16.5	3	<0.220	<2	15	15	7.7
End Aug 12	31/08/12	12/09/12	13/09/12	1.1	85	3,700	<1	<5	<16.5	41	<0.220	8	6.4	146	7.5
End Sep 12	28/09/12	10/10/12	18/10/12	1.0	9	3,300	<1	<5	<15.5	4	<0.220	<2	3.2	14	7.6
End Oct 12	31/10/12	14/11/12	28/11/12	0.7	277	3,500	<1	<5	<15.5	120	<0.220	4	10	117	7.9
End Nov 12	29/11/12	10/12/12	24/12/12	0.9	42	3,400	<1	<5	<15.5	20	<0.220	3	3.2	137	7.8
End Dec 12	28/12/12	11/01/13	30/01/13	1.0	15	3,300	<1	<5	<15.5	8	<0.220	5	4.8	67	7.7
End Jan 13	31/01/13	18/02/13	01/03/13	1.7	50	4,400	<1	<5	<15.5	24	<0.220	18	13	125	7.7
End Feb 13	27/02/13	11/03/13	22/03/13	0.9	8	2,400	<1	<5	<15.5	2	<0.220	6	1.3	57	7.9
End Mar 13	27/03/13	10/04/13	23/04/13	1.2	7	3500	<1	<5	<15.5	2	<0.220	3	0.85	18	7.9
End Apr 13	30/04/13	26/05/13	30/05/13	1.1	6	3400	<1	<5	<15.5	4	<0.220	4	0.50	23	7.9
End May 13	27/05/13	13/06/13	14/06/13	1.2	4	3600	<1	<6	<15.5	2	<0.220	6	8.0	16	7.7

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 13	28/06/13	12/07/13	29/07/13	<0.1	112	3,000	<1	<5	<15.5	44	0.050	13	8.8	42	7.5
End Jul 13	31/07/13	16/08/13	26/08/13	0.9	109	3500	<1	<5	<15.5	50	<0.220	4	8.5	77	7.8
End Aug 13	28/08/13	10/09/13	16/09/13	1.6	105	3400	<1	9	<15.5	48	<0.220	10	11	90	7.5
End Sep 13	19/09/13	2/10/13	3/10/13	1.2	30	3500	<1	<5	<5	13	<0.220	4	5.0	61	7.9
End Oct 13	30/10/13	8/11/13	13/11/13	1.0	61	3700	<1	<5	<15.5	22	<0.220	<3	2.8	108	7.9
End Nov 13	29/11/13	11/12/13	23/12/13	1.0	69	2000	<1	<6	<15.5	34	<0.220	4	4.9	104	7.9
End Dec 13	27/12/13	10/01/14	13/01/14	1.0	15	3600	<1	<5	<16	8	<0.220	2	3.5	53	7.9
End Jan 14	24/01/14	6/02/14	12/02/14	1.1	12	3400	<1	6	<0.5	2	<0.05	<2	2.5	17	7.8
End Feb 14	24/02/14	11/03/14	12/03/14	1.2	<2	3100	<1	<6	<0.5	3	<0.220	<2	1.7	26	8.1
End Mar 14	02/04/14	11/04/14	15/04/14	0.9	104	3000	<1	8	<0.5	38	<0.220	<2	3.9	138	7.9
End Apr 14	28/04/14	07/05/14	08/05/14	1.0	15	3300	<1	<5	<0.5	7	<0.22	<2	2.9	63	8.1
End May 14	26/05/14	04/06/14	05/06/14	1.1	222	4200	<1	<5	<0.5	110	<0.22	3	7.5	18	7.9

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 14	30/06/14	14/07/14	15/07/14	0.9	58	3700	<1	<5	<0.5	45	<0.22	<2	3.3	49	8.0
End Jul 14	31/07/14	18/08/14	21/08/14	1.2	527	3500	<1	<5	<0.5	200	<0.22	2	5.0	54	8.0
End Aug 14	26/08/14	4/09/14	11/09/14	0.8	41	2800	<1	<5	<0.5	20	<0.22	<2	1.6	67	8.0
End Sep 14	24/09/14	7/10/14	10/10/14	0.5	71	2100	<1	<5	<0.5	30	<0.22	<2	8.5	105	7.8
End Oct 14	28/10/14	7/11/14	13/11/14	0.9	57	3400	<1	<5	<0.5	31	<0.22	4	6.2	117	8.1
End Nov 14	24/11/14	12/12/14	12/12/14	1.1	63	3400	<1	<15	<0.5	49	<0.22	13	15	<70	8.0
End Dec 14	29/12/14	14/01/14	15/01/15	1.0	68	3700	<1	<5	<0.5	32	<0.22	3	12	<70	7.9
End Jan 15	28/01/15	10/02/15	18/02/15	1.1	11	3300	<1	<5	<0.5	6	<0.22	5	4.4	<70	8.0
End Feb 15	26/02/15	10/03/15	16/03/15	0.8	41	3800	<1	<5	<0.5	220	<0.22	8	4.4	<82	7.9
End Mar 15	30/03/15	13/04/15	14/04/15	1.0	55	3600	<1	<5	<0.5	49	<0.22	6	5.3	52	8.0
End Apr 15	29/04/15	12/05/15	12/05/15	1.4	19	3600	<1	<5	<0.5	15	<0.22	2	6.9	59	7.8
End May 15	25/05/15	05/06/15	05/06/15	1.1	25	3500	<1	9	<0.5	26	<0.22	6	3.4	101	8.0

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 15	30/06/15	13/07/15	14/07/15	3.4	376	3640	<0.01	<5	<0.5	184	<0.22	8	10.1	<70	8.05
End Jul 15	28/07/15	11/08/15	20/08/15	0.6	132	3540	<0.01	<5	<0.5	62	<0.22	<5	5.4	38	8.05
End Aug 15	27/08/15	15/09/15	15/09/15	0.6	1170	3640	<0.01	9	<0.5	631	<0.20	12	8.8	<70	8.07
End Sep 15	28/09/15	9/10/15	12/10/15	0.8	132	3520	0.02	<5	<0.5	70	<0.20	<5	3.9	18	7.88
End Oct 15	29/10/15	6/11/15	16/11/15	0.6	192	3580	<0.01	15	<0.5	106	<0.20	8	6.2	25	8.03
End Nov 15	23/11/15	15/12/15	16/12/15	0.5	214	3600	<0.01	7	<0.5	313	<0.2	<5	6.0	15	8.02
End Dec 15	29/12/15	13/01/16	13/01/16	0.8	87	3480	0.02	<5	<0.5	36	<0.20	<5	2.6	123	8.05
End Jan 16	29/01/16	12/02/16	16/02/16	0.4	196	3450	0.02	<5	<0.5	144	<0.20	<5	2.7	127	8.09
End Feb 16	23/02/16	10/03/16	14/03/16	0.5	69	3500	<0.01	<5	<0.5	27	<0.20	<5	1.2	<70	8.01
End Mar 16	31/03/16	12/04/16	13/04/16	0.6	114	3260	0.01	<5	<0.5	54	<0.22	<5	2.2	38	8.17
End Apr 16	28/04/16	10/05/16	17/05/16	0.5	191	3350	0.02	<5	<0.5	179	<0.20	<5	3.7	13	7.91
End May 16	30/05/16	10/06/16	19/06/16	0.6	76	3430	0.02	<5	<0.5	46	<0.20	8	4.0	34	7.96

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 16	30/06/16	15/07/16	16/07/16	0.8	5	3400	<1	<5	<0.5	15	<0.20	5	1.9	29	7.97
End Jul 16	29/07/16	15/08/16	16/08/16	1.0	4	3310	<1	<5	<0.5	5	<0.20	<5	1.7	24	8.05
End Aug 16	29/08/16	07/09/16	08/09/16	1.1	3	3820	<1	<5	<0.5	4	<0.20	<5	4.5	35	7.87
End Sep 16	29/09/16	12/10/16	12/10/16	1.1	3	3150	<1	<5	<0.5	3	<0.20	8	3.5	31	7.79
End Oct 16	27/10/16	10/11/16	10/11/16	1.3	<2	3440	<1	<5	<0.5	8	<0.20	6	5.6	562	7.88
End Nov 16	28/11/16	8/12/16	9/12/16	1.0	11	3120	<1	<5	<0.5	12	<0.20	16	3.5	<10	8.18
End Dec 16	28/12/16	10/01/17	10/01/17	1.1	3	3340	<1	20	<0.5	4	<0.20	12	4.2	<10	7.89
End Jan 17	30/01/17	07/02/17	07/02/17	<0.2	<2	4260	<1	<5	<0.5	4	<0.20	5	7.0	21	8.01
End Feb 17	27/02/17	09/03/17	09/03/17	<0.2	2	3080	<1	<8	<0.5	4	<0.2	13	3.8	<10	8.07
End Mar 17	28/03/17	11/04/17	12/04/17	<0.2	<2	3140	<1	<5	<0.5	6	<0.20	5	2.2	<10	8.14
End Apr 17	27/04/17	09/05/17	09/05/17	<0.4	154	3250	<1	<5	<0.5	70	<0.20	<5	8.2	162	8.09
End May 17	30/05/17	8/06/17	9/06/17	0.8	43	3200	<1	<5	<0.5	15	0.06	7	4.7	73	7.85

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 17	26/06/17	07/07/17	10/07/17	<0.4	35	3350	<1	<5	<0.5	67	<0.20	8	5.9	62	7.92
End Jul 17	31/07/17	10/08/17	11/08/17	0.59	96	3330	<1	<5	<0.5	39	<0.20	<5	5.4	121	8.00
End Aug 17	28/08/17	13/09/17	13/09/17	0.57	130	3630	<1	<5	<0.5	46	<0.20	<5	4.3	35	7.99
End Sep 17	29/09/17	13/10/17	13/10/17	0.82	19	3350	<1	<5	<0.5	8	<0.20	<5	4.3	92	8.10
End Oct 17	30/10/17	10/11/17	10/11/17	0.75	35	3970	<1	<5	<0.5	13	<0.20	<5	4.4	127	8.02
End Nov 17	26/11/17	06/12/17	06/12/17	0.99	15	3490	<1	<5	<0.5	4	<0.20	22	3.3	22	7.99
End Dec 17	29/12/17	16/01/18	17/01/18	0.79	18	3970	<1	<5	<0.5	10	<0.20	6	7.1	60	7.61
End Jan 18	29/01/18	6/02/18	8/02/18	1.12	<2	3660	<1	<5	<0.5	2	<0.20	6	4.2	<10	9.50
End Feb 18	26/02/18	08/03/18	13/03/18	0.72	800	3040	<1	<5	<0.5	330	<0.20	<5	1.5	<10	8.56
End Mar 18	28/03/18	12/04/18	13/04/18	0.58	141	3170	<1	<5	<0.5	118	<0.20	7	1.1	<10	7.76
End Apr 18	27/04/18	11/05/18	11/05/18	0.63	2330	3940	<1	<5	<0.5	1090	<0.20	<5	2.5	<10	7.87
End May 18	31/05/18	14/06/18	15/06/18	0.63	496	3670	<1	<5	<0.5	212	<0.20	5	1.6	<10	7.97

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 18	29-06-18	12-07-18	13-07-18	0.56	219	3060	<1	<5	<0.5	94	<0.20	6	1.8	14	8.06
End Jul 18	30-07-18	13-08-18	16-08-18	0.63	258	3960	<1	<5	<0.5	116	<0.20	<5	2.1	18	8.11
End Aug 18	30-08-18	11-09-18	12-09-18	0.66	82	3900	<1	<5	<0.5	31	<0.20	<5	1.5	23	8.22
End Sep 18	26-09-18	11-10-18	11-10-18	0.84	32	4110	<1	<5	<0.5	18	<0.20	<5	1.9	40	8.1
End Oct 18	29-10-18	7-11-18	7-11-18	0.57	<2	2100	<1	<5	<0.5	6	<0.20	23	8.1	155	7.81
End Nov 18	27-11-18	13-12-18	13-12-18	0.67	673	4020	<1	<5	<0.5	359	<0.20	11	7.0	19	7.74
End Dec 18	21-12-18	14-01-19	15-01-19	1.07	120	4300	<1	<5	<0.5	115	<0.20	6	5.1	10	8.54
End Jan 19	25-01-19	8-02-19	11-02-19	0.62	187	4550	<1	<5	<0.5	473	<0.20	13	3.0	131	7.48
End Feb 19	25-02-19	7-03-19	8-03-19	0.48	134	5380	<1	<5	<0.5	680	<0.20	52	7.2	185	7.73
End Mar 19	25-03-19	8-04-19	10-04-19	0.62	475	4670	<1	<5	<0.5	272	<0.20	<5	5.5	323	7.85
End Apr 19	23-04-19	8-05-19	8-05-19	0.82	199	6100	<1	<5	<0.5	89	<0.20	14	5.2	894	8.10
End May 19	28-05-19	12-06-19	14-06-19	0.79	73	5000	<1	<5	<0.5	26	<0.20	22	4.1	267	8.11

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 19	27-06-19	12-07-19	12-07-19	0.78	208	4740	<1	<5	<0.5	373	<0.20	6	5.4	351	7.71
End Jul 19	30-07-19	12-08-19	15-08-19	0.79	210	5520	<1	<5	<0.5	90	<0.20	22	5.9	254	7.98
End Aug 19	26-08-19	9-09-19	13-09-19	0.91	79	5190	<1	<5	<0.5	32	<0.20	10	4.9	364	7.68
End Sep 19	23-09-19	15-10-19	16-10-19	1.04	28	4860	<1	<5	<0.5	12	<0.20	10	4.8	485	7.76
End Oct 19	28-10-19	13-11-19	21-11-19	1.10	8	5490	<1	<5	<0.5	5	<0.20	33	2.6	1094	7.92
End Nov 19	25-11-19	6-12-19	12-12-19	1.08	43	5620	<1	<5	<0.5	26	<0.20	7	8.5	407	7.64
End Dec 19	20-12-19	8-01-20	14-01-20	1.32	14	5210	<1	<5	<0.5	9	<0.20	<5	6.1	506	7.61
End Jan 20	31-01-20	14-02-20	21-02-20	1.45	<2	5340	<1	<5	<0.5	5	<0.2	43	3.7	303	7.80
End Feb 20	26-02-20	12-03-20	21-03-20	1.43	5	5070	<1	<5	<0.5	6	<0.20	46	3.9	266	7.88
End Mar 20	31-03-20	15-04-20	17-04-20	1.22	11	4940	<1	<5	<0.5	7	<0.20	8	3.0	291	7.83
End Apr 20	28-04-20	12-05-20	21-05-20	1.38	3	5110	<1	<5	<0.5	4	<0.20	<5	4.5	589	7.72
End May 20	25-05-20	9-06-20	18-06-20	1.25	3	4870	<1	<5	<0.5	6	<0.20	18	3.8	250	7.72

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 20	30-06-20	14-07-20	17-07-20	1.20	8	4850	<1	<5	<0.5	6	<0.20	20	2.7	937	7.22
End Jul 20	29-07-20	13-08-20	19-08-20	1.21	3	5270	<1	<5	<0.5	4	<0.20	14	4.2	1177	7.91
End Aug 20	31-08-20	15-09-20	18-09-20	0.98	34	5420	<1	<5	<0.5	23	<0.20	<5	4.2	1063	7.56
End Sep 20	29-09-20	14-10-20	22-10-20	1.44	10	5510	<1	<5	<0.5	9	<0.2	30	18	603	8.0
End Oct 20	26-10-20	09-11-20	20-11-20	1.38	9	6360	<1	<5	<0.5	6	<0.20	17	8.9	151	7.8
End Nov 20	23-11-20	08-12-20	18-12-20	1.14	16	6440	<1	<5	<0.5	13	<0.20	11	6.1	617	7.53
End Dec 20	29-12-20	18-01-21	27-01-21	1.37	9	6070	<1	<5	<0.5	6	<0.20	7	2.1	648	7.42
End Jan 21	27-01-21	11-02-21	18-02-21	1.75	8	6430	<1	<5	<0.5	2	<0.20	29	5.9	143	7.96
End Feb 21	23-02-21	10-03-21	17-03-21	1.42	3	6020	<1	<5	<0.5	3	<0.20	8	5.7	239	7.80
End Mar 21	30-03-21	16-04-21	22-04-21	1.36	186	2200	<1	<5	<0.5	134	<0.20	6	9.2	48	7.67
End Apr 21	26-04-21	02-06-21	02-06-21	1.17	55	6280	<1	<7	<0.5	46	<0.20	13	6.7	283	7.61
End May 21	31-05-21	15-06-21	01-07-21	1.19	29	6450	<1	6	<0.5	8	<0.20	12	7.5	198	6.99

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 21	29-06-21	13-07-21	23-07-21	1.01	69	6290	<1	<5	<0.5	22	<0.2	9	4.8	352	7.42
End Jul 21	27-07-21	05-08-21	06-08-21	1.20	5	6660	<1	<5	<0.5	7	<0.2	11	6.2	546	7.95
End Aug 21	31-08-21	13-09-21	16-09-21	1.51	9	6700	<1	<5	<0.5	6	<0.2	10	7.9	906	7.94
End Sep 21	30-09-21	20-10-21	01-11-21	1.58	10	6720	<1	<5	<0.5	4	<0.2	33	14.6	585	7.96
End Oct 21	25-10-21	09-11-21	22-11-21	1.16	40	6050	<1	<5	<0.5	14	<0.2	14	24.6	241	7.92
End Nov 21	26-11-21	12-12-21	22-12-21	1.26	38	6310	<1	8	<0.5	18	<0.2	12	28.4	224	7.88
End Dec 21	29-12-21	20-01-22	02-02-22	0.48	2	7450	<1	<5	<0.5	14	<0.2	16	45.2	<1	6.82
End Jan 22	27-01-22	11-02-22	14-02-22	0.98	<2	7200	<1	<5	<0.5	23	<0.2	31	78.1	<1	7.59
End Feb 22	28-02-22	18-03-22	23-03-22	1.00	9	5620	<1	<5	<0.5	6	<0.2	10	2.9	241	7.39
End Mar 22	29-03-22	26-04-22	04-05-22	0.44	<2	2240	<1	<5	<0.5	2	<0.2	<5	0.4	14	7.80
End Apr 22	26-04-22	18-05-22	25-05-22	1.64	7	6930	<1	<5	<0.5	5	<0.2	<5	9.4	707	7.52
End May 22	31-05-22	24-06-22	07-07-22	1.28	2	5810	<1	<5	<0.5	4	<0.2	9	3.3	22	7.73

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 22	27-06-22	11-07-22	15-07-22	1.65	2	6710	<1	<5	<0.5	4	<0.2	14	13.5	11	7.45
End Jul 22	28-07-22	15-08-22	18-08-22	1.61	260	7090	<1	<5	<0.5	240	<0.2	<5	25.2	69	7.5
End Aug 22	29-08-22	13-09-22	23-09-22	1.09	241	7530	<1	<5	<0.5	188	<0.2	8	9.5	17	7.69
End Sep 22	26-09-22	11-10-22	24-10-22	1.02	108	7940	<1	<5	<0.5	50	<0.2	10	6.1	40	7.79
End Oct 22	28-10-22	14-11-22	28-11-22	1.06	31	7340	<1	<5	<0.5	16	<0.2	<5	5.4	69	7.87
End Nov 22	25-11-22	20-01-23	02-05-23	1.49	35	8680	<1	<5	<0.5	18	<0.2	5	5.7	46	7.86
End Dec 22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Jan 23	20-01-23	08-02-23	02-05-23	1.78	<2	7060	<1	<5	<0.5	4	<0.2	9	5.2	20	7.51
End Feb 23	23-02-23	09-03-23	02-05-23	1.08	31	5700	<1	<5	<0.5	11	<0.2	8	6.2	76	7.62
End Mar 23	29-03-23	14-04-23	02-05-23	1.50	99	8330	<1	<5	<0.5	44	<0.2	11	7.0	136	7.41
End Apr 23	27-04-23	08-05-23	15-05-23	1.36	4	7710	<1	<5	<0.5	9	<0.2	8	3.0	45	7.82
End May 23	31-05-23	13-06-23	20-06-23	1.11	253	7390	<1	<5	<0.5	98	<0.2	6	10.5	66	7.59

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 23	07-07-23	07-08-23	15-08-24	1.15	67	7910	<1	<5	<0.5	29	<0.2	10	1.2	<10	7.69
End Jul 23	28-07-23	06-09-23	12-09-24	1.08	54	4680	<1	<5	<0.5	22	<0.2	10	5.4	49	7.04
End Aug 23	30-08-23	05-02-24	07-02-24	1.03	274	7540	<1	<5	<0.5	122	<0.2	10	13.4	315	7.86
End Sep 23	27-09-23	05-02-24	07-02-24	1.00	269	7960	<1	<5	<0.5	98	<0.2	7	12.1	93	7.71
End Oct 23	26-10-23	05-02-24	07-02-24	0.93	356	7900	<1	<5	<0.5	122	<0.2	6	11.1	87	7.67
End Nov 23	29-11-23	05-02-24	07-02-24	0.91	<2	2710	<1	<5	<0.5	6	<0.2	19	30.4	<10	7.84
End Dec 23	15-12-23	05-02-24	07-02-24	1.18	70	7960	<1	<5	<0.5	22	<0.2	<5	5.0	31	8.00
End Jan 24	30-01-24	08-02-24	13-02-24	1.47	17	8320	<1	<5	<0.5	7	<0.2	<5	3.5	120	8.02
End Feb 24	26-02-24	05-03-24	06-03-24	1.08	323	8240	<1	<5	<0.5	151	<0.2	10	11.7	98	7.60
End Mar 24	27-03-24	10-04-24	11-03-24	1.10	80	8180	<1	<5	<0.5	32	<0.2	20	4.2	70	7.81
End Apr 24	22-04-24	07-05-24	10-05-24	0.92	74	8500	<1	<5	<0.5	34	<0.2	6	8.6	110	7.81
End May 24	28-05-24	13-06-24	16-06-24	1.44	19	8190	<1	<5	<0.5	10	<0.2	10	9.8	146	7.83

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Table 3 Continued: Point 4 Water Quality Monitoring Data

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 24	04-07-24	11-07-24	15-07-24	1.32	49	8040	0.02	<5	<0.0005	24	<0.1	16	16	119	7.77
End Jul 24	07-08-24	14-08-24	19-08-24	1.24	622	8080	0.01	<5	<0.0005	282	<0.1	13	6.5	67	7.87
End Aug 24	04-09-24	11-09-24	16-09-24	1.32	583	8820	<0.01	<5	<0.0005	287	<0.1	12	13.1	95	7.91
End Sep 24	05-10-24	12-10-24	15-10-24	1.02	200	8250	<0.01	<5	<0.0005	146	<0.1	8	14.6	72	7.21
End Oct 24	06-11-24	13-11-24	18-11-24	1.08	197	7900	<0.01	<5	<0.0005	92	0.1	17	7.1	89	7.83
End Nov 24	11-12-24	18-12-24	23-12-24	1.49	112	7980	<0.01	<5	<0.0005	63	<0.1	14	5.2	55	7.73
End Dec 24	10-01-25	17-01-25	21-01-25	1.07	14	8340	<0.01	<5	<0.0005	31	<0.1	5	2.8	11	7.72
End Jan 25	06-02-25	13-02-25	18-02-25	1.23	98	7540	0.01	<5	<0.0005	44	<0.1	8	8.4	64	7.66
End Feb 25	12-03-25	19-03-25	24-03-35	1.40	9	7990	<0.01	<5	<0.0005	7	<0.1	6	4.5	0.01	7.61
End Mar 25	08-04-25	15-04-25	28-04-25	1.74	3	7250	<0.01	<5	<0.0005	6	<0.1	6	6.4	<0.01	7.67
End Apr 25	07-05-25	14-05-25	19-05-25	0.91	45	6490	0.02	<5	<0.0005	15	1.86	8	10.1	0.01	7.6
End May 25	05-06-25	12-06-25	16-06-25	0.86	1050	8110	<0.01	<5	<0.0005	554	<0.1	<5	7.5	<0.010	7.66

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 25	24-06-25	04-07-25	16-07-25	0.65	362	6310	<0.01	<5	<0.0005	130	<0.1	<5	6.8	0.015	7.91
End Jul 25	30-07-25	14-08-25	21-08-25	0.84	350	6480	0.06	<5	<0.0005	138	<0.1	<5	6.2	<0.010	7.98
End Aug 25	31-08-25	14-09-25	21-09-25	0.86	363	6480	<0.01	<5	<0.0005	148	<0.1	<5	4.6	0.016	7.93
End Sep 25	29-09-25	30-09-25	16-10-25	0.77	427	6540	<0.01	<5	<0.0005	190	<0.1	9	9.1	0.036	7.78
End Oct 25	29-10-25	17-11-25	24-11-25	1.00	76	6370	<0.01	<5	<0.0005	40	<0.1	10	7.3	0.035	7.94
End Nov 25	27-11-25	28-11-25	12-12-25	0.85	304	6350	<0.01	<5	<0.0005	146	<0.1	11	3.9	0.036	7.72
End Dec 25	29-12-25	30-12-26	27-01-26	0.89	79	6400	0.02	<5	<0.0005	37	<0.1	<5	6.6	0.032	8.06
End Jan 26	06-02-26	29-01-26	17-02-26	1.47	4	6070	<0.01	<5	<0.0005	6	<0.1	13	4.0	<0.010	7.79
End Feb 26	05-03-26	26-02-26	10-3-26	0.98	530	5400	0.08	<5	<0.0005	211	<0.1	<5	3.9	<0.010	7.79
End Mar 26	07-04-26	25-03-26	29-4-26	0.79	123	5510	<0.01	<5	<0.0005	51	<0.1	6	3.7	<0.010	7.29
End Apr 26	06-05-26	29-04-26	14-05-26	0.94	359	5220	0.05	<5	<0.0005	162	<0.1	<5	5.0	<0.010	7.84
End May 26	09-06-26	27-05-26	15-06-26	1.04	92	5450	<0.01	<5	<0.0005	42	340.08	31	5.2	<0.010	7.90

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

Licensee: Elgas Port Botany
EPL no.: 10698

EPA Identification Number: Point 4
There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Monthly as required by EPL.

Test due date	Actual test date	Date Analysis Obtained	Date Published	Ammonia	BOD	Conductivity	Nitrate	Oil & Grease	PAH	TOC	TPH (C_6-C_{36})	Suspended solids	Turbidity	VOC (C_1-C_5)	pH
Units				**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**µg/L**	**mg/L**	**mg/L**	**mg/L**	**NTU**	**µg/L**	**pH**
End Jun 26	13-07-26	23-06-26	20-07-26	1.17	60	5140	<0.01	<5	<0.0005	30	<0.1	6	3.0	0.011	8.08
End Jul 26	10-08-26	30-07-26	19-08-26	1.22	114	5440	<0.01	<5	<0.0005	62	<0.1	8	2.0	0.012	7.65
End Aug 26	07-09-26	26-08-26	08-09-26	1.10	57	5080	<0.01	<5	<0.0005	25	<0.1	8	2.2	<0.010	7.99
End Sep 26	07-10-26	25-09-26	09-10-26	1.04	66	4830	<0.01	<5	<0.0005	30	<0.1	16	2.6	<0.010	7.58
End Oct 26	06-11-26	29-10-26	09-11-26	1.69	222	6010	<0.01	<5	<0.0005	235	<0.1	9	2.8	<0.012	7.81

Definitions: PAH: Polynuclear aromatic hydrocarbons; TOC: Total Organic Carbon TPH: Total Petroleum Hydrocarbons; VOC: Volatile Organic Compounds;
Units: mg/L: milligrams per litre; µg/L: micrograms per litre; NTU: Nephelometric Turbidity Unit; µS/cm: microsiemens per centimetre

The following table shows the monthly water quality monitoring data at Point 2 in a meaningful summary table from March 2012 onwards. Any obtained data can be requested from Elgas in written form.

Table 4: Point 2 Water Quality Monitoring Data

Test due date	Actual test date	Date Analysis Obtained	Date Published	BOD	Oil & Grease	Suspended solids	Turbidity	pH
Units				**mg/L**	**mg/L**	**mg/L**	**NTU**	**pH**
End Mar 12	Note 1		1/07/12					
End Apr 12	Note 1		1/07/12					
End May 12	Note 1		1/07/12					
End Jun 12	Note 1		31/07/12					
End Jul 12	Note 1		15/08/12					
End Aug 12	Note 1		13/09/12					
End Sep 12	Note 1		18/10/12					
End Oct 12	Note 1		28/11/12					
End Nov 12	Note 1		24/12/12					
End Dec 12	Note 1		30/01/13					
End Jan 13	Note 1		01/03/13					
End Feb 13	Note 1		22/03/13					
End Mar 13	Note 1		23/04/13					
End Apr 13	Note 1		30/05/13					
End May 13	Note 1		14/06/13					
End Jun 13	Note 1		29/07/13					
End Jul 13	Note 1		26/08/13					
End Aug 13	Note 1		16/09/13					
End Sep 13	Note 1		3/10/13					
End Oct 13	Note 1		13/11/13					
End Nov 13	Note 1		23/12/13					
End Dec 13	Note 1		13/01/14					
End Jan 14	Note 1		12/02/14					
End Feb 14	Note 1		12/03/14					
End Mar 14	Note 1		15/04/14					
End Apr 14	Note 1		08/05/14					
End May 14	Note 1		05/06/14					
End Jun 14	Note 1		15/07/14					
End Jul 14	Note 1		21/08/14					
End Aug 14	Note 1		10/09/14					
End Sept 14	Note 1		10/10/14					
End Oct 14	Note 1		13/11/14					
End Nov 14	Note 1		12/12/14					
End Dec 14	Note 1		15/01/15					
End Jan 15	Note 1		18/02/15					
End Feb 15	Note 1		16/03/15					
End Mar 15	Note 1		14/04/15					

Table 4 continued: Point 2 Water Quality Monitoring Data

Test due date	Actual test date	Date Analysis Obtained	Date Published	BOD	Oil & Grease	Suspended solids	Turbidity	pH
Units				mg/L	mg/L	mg/L	NTU	pH
End Apr 15	Note 1		12/05/15					
End May 15	Note 1		05/06/15					
End Jun 15	Note 1		14/07/15					
End Jul 15	Note 1		20/08/15					
End Aug 15	Note 1		15/09/15					
End Sep 15	Note 1		12/10/15					
End Oct 15	Note 1		16/11/15					
End Nov 15	Note 1		16/12/15					
End Dec 15	Note 1		13/01/16					
End Jan 16	Note 1		13/02/16					
End Feb 16	Note 1		14/03/16					
End Mar 16	Note 1		13/04/16					
End Apr 16	Note 1		17/05/16					
End May 16	Note 1		19/06/16					
End Jun 16	Note 1		16/07/16					
End Jul 16	Note 1		16/08/16					
End Aug 16	Note 1		08/09/16					
End Sep 16	Note 1		12/10/16					
End Oct 16	Note 1		10/11/16					
End Nov 16	Note 1		09/12/16					
End Dec 16	Note 1		10/01/17					
End Jan 17	Note 1		07/02/17					
End Feb 17	Note 1		09/03/17					
End Mar 17	Note 1		12/04/17					
End Apr 17	Note 1		09/05/17					
End May 17	Note 1		09/06/17					
End Jun 17	Note 1		10/07/17					
End Jul 17	Note 1		11/08/17					
End Aug 17	Note 1		13/09/17					
End Sep 17	Note 1		13/10/17					
End Oct 17	Note 1		10/11/17					
End Nov 17	Note 1		06/12/17					
End Dec 17	Note 1		17/01/18					
End Jan 18	Note 1		8/02/18					
End Feb 18	Note 1		13/03/18					
End Mar 18	Note 1		13/04/18					
End Apr 18	Note 1		11/05/18					

Table 4 continued: Point 2 Water Quality Monitoring Data

Test due date	Actual test date	Date Analysis Obtained	Date Published	BOD	Oil & Grease	Suspended solids	Turbidity	pH
Units				mg/L	mg/L	mg/L	NTU	pH
End May 18	Note 1		15/06/18					
End Jun 18	Note 1		13/07/18					
End Jul 18	Note 1		16/08/18					
End Aug 18	Note 1		12/09/18					
End Sep 18	Note 1		11/10/18					
End Oct 18	Note 1		7/11/18					
End Nov 18	Note 1		13/12/18					
End Dec 18	Note 1		15/01/19					
End Jan 19	Note 1		11/02/19					
End Feb 19	Note 1		8/03/19					
End Mar 19	Note 1		10/04/19					
End Apr 19	Note 1		8/05/19					
End May 19	Note 1		14/06/19					
End Jun 19	Note 1		12/07/19					
End Jul 19	Note 1		15/08/19					
End Aug 19	Note 1		13/09/19					
End Sep 19	Note 1		16/10/19					
End Oct 19	Note 1		21/11/19					
End Nov 19	Note 1		12/12/19					
End Dec 19	Note 1		14/01/20					
End Jan 20	Note 1		21/02/20					
End Feb 20	Note 1		21/03/20					
End Mar 20	Note 1		17/04/20					
End Apr 20	Note 1		21/05/20					
End May 20	Note 1		18/06/20					
End Jun 20	Note 1		17/07/20					
End Jul 20	Note 1		19/08/20					
End Aug 20	Note 1		18-09-20					
End Sep 20	Note 1		22-10-20					
End Oct 20	Note 1		20-11-20					
End Nov 20	Note 1		18-12-20					
End Dec 20	Note 1		27-01-21					
End Jan 21	Note 1		18-02-21					
End Feb 21	Note 1		17-03-21					
End Mar 21	Note 1		22-04-21					
End Apr 21	Note 1		01-06-21					
End May 21	Note 1		01-07-21					
End June 21	Note 1		23-07-21					

Table 4 continued: Point 2 Water Quality Monitoring Data

Test due date	Actual test date	Date Analysis Obtained	Date Published	BOD	Oil & Grease	Suspended solids	Turbidity	pH
Units				mg/L	mg/L	mg/L	NTU	pH
End Jul 21	Note 1		06-08-21					
End Aug 21	Note 1		16-09-21					
End Sep 21	Note 1		01-11-21					
End Oct 21	Note 1		22-11-21					
End Nov 21	Note 1		22-12-21					
End Dec 21	Note 1		02-02-22					
End Jan 22	Note 1		14-02-22					
End Feb 22	Note 1		23-03-22					
End Mar 22	Note 1		04-05-22					
End Apr 22	Note 1		25-05-22					
End May 22	Note 1		07-07-22					
End Jun 22	Note 1		15-07-22					
End Jul 22	Note 1		18-08-22					
End Aug 22	Note 1		23-09-22					
End Sep 22	Note 1		24-10-22					
End Oct 22	Note 1		28-11-22					
End Nov 22	Note 1		02-05-23					
End Dec 22	Note 1		02-05-23					
End Jan 23	Note 1		02-05-23					
End Feb 23	Note 1		02-05-23					
End Mar 23	Note 1		02-05-23					
End Apr 23	Note 1		15-05-23					
End May 23	Note 1		20-06-23					
End Jun 23	Note 1		15-08-24					
End Jul 23	Note 1		12-09-24					
End Aug 23	Note 1		07-02-24					
End Sep 23	Note 1		07-02-24					
End Oct 23	Note 1		07-02-24					
End Nov 23	Note 1		07-02-24					
End Dec 23	Note 1		07-02-24					
End Jan 24	Note 1		13-02-24					
End Feb 24	Note 1		06-03-24					
End Mar 24	Note 1		11-03-24					
End Apr 24	Note 1		10-05-24					
End May 24	Note 1		16-06-24					
End Jun 24	Note 1		15-07-24					
End Jul 24	Note 1		19-08-24					
End Aug 24	Note 1		16-09-24					

End Sep 24	Note 1		15-10-24					
End Oct 24	Note 1		18-11-24					
End Nov 24	Note 1		23-12-24					
End Dec 24	Note 1		21-01-25					
End Jan 25	Note 1		18-02-25					
End Feb 25	Note 1		24-03-35					
End Mar 25	Note 1		28-04-25					
End Apr 25	Note 1		19-05-25					
End May 25	Note 1		16-06-25					
End Jun 25	Note 1		16-07-25					
End Jul 25	Note 1		21-08-25					
End Aug 25	Note 1		21-09-25					
End Sep 25	Note 1		16-10-25					
End Oct 25	Note 1		24-11-25					
End Nov 25	Note 1		12-12-25					
End Dec 25	Note 1		27-01-26					
End Jan 26	Note 1		18-02-26					
End Feb 26	Note 1		10-03-26					
End Mar 26	Note 1		29-04-26					
End Apr 26	Note 1		14-05-26					
End May 26	Note 1		15-06-26					
End Jun 26	Note 1		20-07-26					
End Jul 26	Note 1		19-08-26					
End Aug 26	Note 1		08-09-26					
End Sep 26	Note 1		09-10-26					
End Oct 26	Note 1		09-11-26					

	Pollutant	BOD	Oil & Grease	Suspended Solids	Turbidity	pH
	Units of measure	**mg/L**	**mg/L**	**mg/L**	**NTU**	**pH**
Year to date	**Minimum value**					
	Mean value					
	Maximum value					
EPL 100 Percentile Concentration Limit		20	10	50	10	6.5 – 8.5

Definitions: BOD: Biochemical Oxygen Demand
Units: mg/L: milligrams per litre; µg/L; NTU: Nephelometric Turbidity Unit

Note 1: There was no discharge (no overflow event) for monitoring point 2 during this month.

Environmental Monitoring Data – Elgas Port Botany – Special Conditions

Elgas also conducts additional monitoring in accordance with Special Conditions listed in EPL 10698.

Based on the requirement outlined in Condition E1: Desludging of Aeration Ponds, Elgas Port Botany is to monitor the following:

E1.1 On or before February 2018 and at least once in every two years, the Licensee must undertake de-sludging of its aeration ponds. De-sludging activities must include the following:

- The removal of debris and sediment build up in the aeration ponds as far as reasonably practicable;
- Sampling and analysis 1 month prior to de-sludging;
- Sampling and analysis 1 month post desludging;
- Sampling and analysis to be undertaken at the following locations WS (inlet), WS (outlet), WS (pond), WS (weir), Botany Sands Aquifer and Hawksbury Upper and Lower Aquifers; and
- Analysis must consist, at a minimum, of the following pollutants: biochemical oxygen demand and hydrocarbon gases (C_1 – C_4)

Table 5 summarises when Elgas Port Botany expects our next set of monitoring data. provides a reference to the position of each of the monitoring points.

Table 5: Expected Future Monitoring Data Sets – Condition E1.1

Published:
Licensee: Elgas Port Botany
EPL no.: 10698
Condition E1.1

Location	Monitoring Required	Description of the Location	Expected date(s) to post next set of monitoring data
WS (inlet)	Water Quality Monitoring	Cavern seepage water prior to the air stripping column and flash drum.	Every 2 years in June
WS (outlet)	Water Quality Monitoring	Outlet pipe located after the air stripping column and flash drum.	Every 2 years in June
WS (pond)	Water Quality Monitoring	Aeration Pond at the discharge point.	Every 2 years in June
WS (weir)	Water Quality Monitoring	Weir between the first and second aeration ponds.	Every 2 years in June
SP1	Water Quality Monitoring	Botany Sands Aquifer (9 – 12 mbgl)	Every 2 years in June
SP5	Water Quality Monitoring	Botany Sands Aquifer (10 – 15 mbgl)	Every 2 years in June
RepBHB2 (L)	Water Quality Monitoring	Lower Hawksbury Sandstone Aquifer (88 – 121 mbgl)	Every 2 years in June
RepBHB2 (U)	Water Quality Monitoring	Upper Hawksbury Sandstone Aquifer (50 – 68 mbgl)	Every 2 years in June

Note: mbgl = meters below ground level



Figure 2: Water Sampling Locations – Condition E1.1

When monitoring is published it will appear in a table similar to Table 6.

Table 6: Water Quality Results - Condition E1.1

Licensee: Elgas Port Botany **EPL no.: 10698**																	
Concentration Limits: There are no EPL concentration limits for the analytes listed below. **Monitoring Frequency:** Every two years.																	
Analyte	Units	WS (Inlet)		WS (Outlet)		WS (Weir)		WS (Pond)		REPBHB2 (U)		REPBHB2 (L)		SP1		SP5	
		Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar
BOD	mg/L																
Methane	µg/L																
Ethene	µg/L																
Ethane	µg/L																
Propene	µg/L																
Propane	µg/L																
Butene	µg/L																
Butane	µg/L																

Environmental Monitoring Data to Date – Elgas Port Botany – Special Conditions

The following tables shows the two-yearly water quality monitoring data for condition E1.1 from February 2018 onwards.

Table 6: Water Quality Monitoring Results – Condition E1.1 – 2018

Licensee: Elgas Port Botany **EPL no.: 10698**																	
Concentration Limits: There are no EPL concentration limits for the analytes listed below. **Monitoring Frequency:** Every two years.																	
Analyte	Units	WS (Inlet)		WS (Outlet)		WS (Weir)		WS (Pond)		REPBHB2 (U)		REPBHB2 (L)		SP1		SP5	
		Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar
BOD	mg/L	17	446	<2	431	5	491	5	494	4	6	<2	9	2	8	<2	5
Methane	µg/L	134	127	<10	<10	44	49	21	18	114	88	9040	9160	894	980	46	121
Ethene	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethane	µg/L	4290	4380	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propene	µg/L	866	424	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propane	µg/L	100000	89700	<10	211	180	17	16	<10	<10	<10	<10	<10	<10	<10	<10	<10
Butene	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Butane	µg/L	42	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Table 6: Water Quality Monitoring Results – Condition E1.1 – 2020

Licensee: Elgas Port Botany **EPL no.: 10698**																	
Concentration Limits: There are no EPL concentration limits for the analytes listed below. **Monitoring Frequency:** Every two years.																	
Analyte	Units	WS (Inlet)		WS (Outlet)		WS (Weir)		WS (Pond)		REPBHB2 (U)		REPBHB2 (L)		SP1		SP5	
		Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar
BOD	mg/L	12	<2	8	<2	5	7	4	<2	<2	7	<2	3	7	5	<2	<2
Methane	µg/L	108	90	<10	12	12	<10	25	<10	84	83	5400	5220	4860	6200	92	99
Ethene	µg/L	22	37	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethane	µg/L	3050	3130	75	119	24	28	33	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propene	µg/L	828	1270	39	77	<10	12	12	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propane	µg/L	44400	60900	1130	2340	451	720	552	17	<10	<10	<10	<10	<10	<10	<10	<10
Butene	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Butane	µg/L	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Table 6: Water Quality Monitoring Results – Condition E1.1 – 2022

Licensee: Elgas Port Botany
EPL no.: 10698

Concentration Limits: There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Every two years.

Analyte	Units	WS (Inlet)		WS (Outlet)		WS (Weir)		WS (Pond)		REPBHB2 (U)		REPBHB2 (L)		SP1		SP5	
		Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar
BOD	mg/L	5	9	8	6	2	3	2	4	7	<2	<2	<2	12	<2	<2	2
Methane	µg/L	93	82	27	18	42	15	20	<10	19	40	8410	8360	24400	19300	86	66
Ethene	µg/L	25	86	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethane	µg/L	5050	4390	564	251	259	227	127	70	<10	<10	<10	<10	<10	<10	<10	<10
Propene	µg/L	519	1340	90	150	34	124	12	34	<10	<10	<10	<10	<10	<10	<10	<10
Propane	µg/L	92300	67000	10200	4180	5180	3570	2440	1320	<10	<10	<10	<10	<10	<10	<10	<10
Butene	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Butane	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Table 6: Water Quality Monitoring Results – Condition E1.1 – 2024

Licensee: Elgas Port Botany
EPL no.: 10698

Concentration Limits: There are no EPL concentration limits for the analytes listed below.
Monitoring Frequency: Every two years.

Analyte	Units	WS (Inlet)		WS (Outlet)		WS (Weir)		WS (Pond)		REPBHB2 (U)		REPBHB2 (L)		SP1		SP5	
		Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar	Jan	Mar
BOD	mg/L	20	71	10	64	16	71	15	69	4	4	4	3	4	8	<2	<2
Methane	µg/L	82	59	47	<10	120	57	80	25	45	81	8740	5690	1570	2620	90	80
Ethene	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethane	µg/L	2710	2410	<10	11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propene	µg/L	142	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propane	µg/L	41000	38400	<10	184	117	160	39	40	<10	<10	<10	<10	<10	<10	<10	<10
Butene	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Butane	µg/L	<10	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

In Conclusion

We at Elgas take all reasonable care to make sure the monitored data we obtain is correct and accurate. If due to events out of our control we find that any of our published monitoring data is inaccurate or incorrect, we will provide a correction log. The correction log will explain the reason for the suspected or actual incorrect data, and provide an updated correct monitoring log. The following table shows how this will be set up in the event it is needed. To date it has not been needed.

Correction Log

Licensee: Elgas Port Botany **EPL no.: 10698**					
Sample date and time	**Original data**	**Corrected data**	**Date corrected**	**Date originally published**	**Reason**
	NCR*	NCR	NCR	NCR	NCR

*NCR - No Corrections Required to date

If you would like to verify anything with us regarding our environmental monitoring data, please feel free to give us a call on the number shown on our contacts page.