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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **pH** |
| **Units** |  |  |  | **mg/L** | **mg/L** | **μS/cm** | **mg/L** | **mg/L** | **μg/L** | **mg/L** | **mg/L** | **mg/L** | **NTU** | **μg/L** | **pH** |
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**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** |
|  |  |  |  |  |  |  |  |  |
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| --- | --- | --- | --- | --- | --- | --- |
|  | **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 |

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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 |

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**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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 |

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**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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 |

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**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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 |

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**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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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 (C6-C36)** | **Suspended solids** | **Turbidity** | **VOC (C1-C5)** | **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

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 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **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 (C1 – C4)

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.