



## Feb 2022 - Carrington Grain Terminal Monitoring Summary Report

The following Newcastle Grain Terminal monthly monitoring summary report has been prepared by GrainCorp in accordance with Section 66 of the *Pollution of the Environment Operations Act 1997*. Monitoring data shared with the public on the website includes that collected as part of the Environmental Protection Licence (EPL) for the Newcastle Grain Terminal site. Monthly monitoring summaries are completed on the last day of any given month for the data collected.

### Report contents

**Section A.** Map of Newcastle Grain Terminal and the location of sampling points as per the Environmental Protection Licence

**Section B.** Newcastle Grain Terminal fumigation emissions monitoring (Sampling Point 2)

Monitoring triggered in this period and summarised in report?

Yes  
see Section B

No  
has not been included in report

### Site details

|                          |   |
|--------------------------|---|
| EPL Number               | 1296  |
| Licensee Name            | GrainCorp Operations Limited  |
| Address                  | Newcastle Grain Terminal  |
| EPL Public Register Link | <a href="https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=1296&amp;id=1296&amp;option=licence&amp;searchrange=licence&amp;range=POEO%20licence&amp;prp=no&amp;status=Issued">https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=1296&amp;id=1296&amp;option=licence&amp;searchrange=licence&amp;range=POEO%20licence&amp;prp=no&amp;status=Issued</a> |

### Technical Reviewer

A. Costa  
Name

18/03/2022  
Date

### Date published to website

18/03/2022  
Date

### A. Sampling points as per EPL - Newcastle Grain Terminal



### Environment Protection licence (EPL) Monitoring Locations

| Point | Location at Newcastle Grain Terminal  |
|-------|---|
| 2     | Discharge from the vent stack fumigation chamber located at the northern-most grain silos |

## B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2022

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

**Monitoring frequency:** Continuous during every ventilation

**No. of ventilation events during month:** 14

| Sampling date<br>(start of ventilation event) and silo number | Pollutant (discharged to air) | Sampler<br>(fumigator) | Result     |            | Limit                         | Units of measure      | Monitoring point location | Exceedance<br>(yes/no) |
|---|-------------------------------|------------------------|------------|------------|-------------------------------|-----------------------|---------------------------|------------------------|
|   |                               |                        | Min. value | Max. value | 100 percentile<br>(allowable) |                       |                           |                        |
| 1/2/22 11:00am silo K3  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | P.Carpenter            | 0.4        | 2.8        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | P.Cowling              | 0.23       | 0.259      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 1/2/22 16:20 silo J5  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | P.Carpenter            | 0.2        | 7.2        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | J.Neill                | 0.231      | 0.237      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 2/2/22 8:30 Silo H1   | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | P.Carpenter            | 0.4        | 5.2        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | S.Kidd                 | 0.277      | 0.355      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |

## B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2022

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

**Monitoring frequency:** Continuous during every ventilation

**No. of ventilation events during month:** 14

| Sampling date<br>(start of ventilation event) and silo number | Pollutant (discharged to air) | Sampler<br>(fumigator) | Result     |            | Limit                         | Units of measure      | Monitoring point location | Exceedance<br>(yes/no) |
|---|-------------------------------|------------------------|------------|------------|-------------------------------|-----------------------|---------------------------|------------------------|
|   |                               |                        | Min. value | Max. value | 100 percentile<br>(allowable) |                       |                           |                        |
| 4/2/22 11:10 Silo K7  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | P.Carpenter<br>S.Kidd  | 0.6        | 3.4        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                      | 0.155      | 0.324      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 5/02/2022 9:25 Silo K5  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly<br>S.Kidd   | 0.4        | 5.2        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                      | 0.256      | 0.266      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 6/02/2022 9:40 Silo J1  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly J.Neil      | 0.4        | 6          | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                      | 0.259      | 0.293      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |

## B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2022

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

**Monitoring frequency:** Continuous during every ventilation

**No. of ventilation events during month:** 14

| Sampling date<br>(start of ventilation event) and silo number | Pollutant (discharged to air) | Sampler<br>(fumigator) | Result     |            | Limit                         | Units of measure      | Monitoring point location | Exceedance<br>(yes/no) |
|---|-------------------------------|------------------------|------------|------------|-------------------------------|-----------------------|---------------------------|------------------------|
|   |                               |                        | Min. value | Max. value | 100 percentile<br>(allowable) |                       |                           |                        |
| 7/02/2022 9:00 Silo G7  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly J.Neil      | 0.8        | 4.6        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                      | 0.179      | 0.182      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 1/02/2022 8:57 Silo G3  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly J.Neil      | 0.4        | 2.8        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                      | 0.266      | 0.269      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 9/02/2022 8:45 Silo G5  | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly<br>P.Cowing | 1.2        | 6.4        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                      | 0.203      | 0.207      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |

## B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2022

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

**Monitoring frequency:** Continuous during every ventilation

**No. of ventilation events during month:** 14

| Sampling date<br>(start of ventilation event) and silo number | Pollutant (discharged to air) | Sampler<br>(fumigator) | Result     |            | Limit                         | Units of measure      | Monitoring point location | Exceedance<br>(yes/no) |
|---|-------------------------------|------------------------|------------|------------|-------------------------------|-----------------------|---------------------------|------------------------|
|   |                               |                        | Min. value | Max. value | 100 percentile<br>(allowable) |                       |                           |                        |
| 10/02/2022 14:50 Silo H5                                      | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly             | 1.2        | 7.8        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | P.Cowing               | 0.102      | 0.16       | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 15/02/22 7:50 Silo J3   | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly             | 0.6        | 6          | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | P.Cowing               | 0.102      | 0.344      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 17/02/2022 8:40 Silo H4                                       | <i>Scenario 1</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly             | 0.2        | 4.8        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | J.Neill                | 0.167      | 0.176      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                        |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                      | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                      | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |

## B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2022

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

**Monitoring frequency:** Continuous during every ventilation

**No. of ventilation events during month:** 14

| Sampling date<br>(start of ventilation event) and silo number | Pollutant (discharged to air) | Sampler<br>(fumigator)    | Result     |            | Limit                         | Units of measure      | Monitoring point location | Exceedance<br>(yes/no) |
|---|-------------------------------|---------------------------|------------|------------|-------------------------------|-----------------------|---------------------------|------------------------|
|   |                               |                           | Min. value | Max. value | 100 percentile<br>(allowable) |                       |                           |                        |
| 24/02/22 17:03 Silo K5  | <i>Scenario 1</i>             |                           |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly<br>P.Carpenter | 1.8        | 5          | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                         | 0.387      | 0.394      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                           |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                         | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                         | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |
| 25/02/22 16:00 Silo G7  | <i>Scenario 1</i>             |                           |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | A.Donnelly<br>P.Carpenter | 4.2        | 6.2        | 10                            | grams per cubic meter | Point 2                   | no                     |
|   | Volumetric flow rate          | -                         | 0.321      | 0.351      | 0.494                         | meters cubed/ second  | Point 2                   | no                     |
|   | <i>Scenario 2</i>             |                           |            |            |                               |                       |                           |                        |
|   | Methyl bromide                | -                         | -          | -          | 19.4                          | grams per cubic meter | Point 2                   | -                      |
|   | Volumetric flow rate          | -                         | -          | -          | 0.17                          | meters cubed/ second  | Point 2                   | -                      |

### MONITORING NOTES:

Scenario 1 is defined as having a fumigation concentration of 10 grams per cubic meter and a one hour initial ventilation period

Scenario 2 is defined as having a fumigation concentration of 19.4 grams per cubic meter and a three hour initial ventilation period