

Operator: CWM Environmental Ltd  
Permit: CP3735PB

Installation: Nantycaws Landfill Site  
Form: Leachate Q1 2022

## Reporting of leachate monitoring for the period from 01-Jan-2022 to 31-Mar-2022

| Monitoring location | Substance / parameter <sup>(6)</sup>       | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Cell 1/2 Sump       | Base of well/borehole/sump                 | Field                      | 11/01/2022          |                                 | 14.7                      | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 14.7                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 14.7                      | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 14.46                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 14.42                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 14.41                     | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 3m above base                   | 0.24                      | m                   |
|                     |                                            |                            | 08/02/2022          | 3m above base                   | 0.28                      | m                   |
|                     |                                            |                            | 02/03/2022          | 3m above base                   | 0.29                      | m                   |
|                     | Total organic carbon                       | SUB                        | 11/01/2022          |                                 | 608                       | mg/l                |
|                     | Total Alkalinity as CaCO <sub>3</sub>      | TM043                      | 11/01/2022          |                                 | 5800                      | mg/l                |
|                     | Biological oxygen demand                   | TM045                      | 11/01/2022          |                                 | 68.2                      | mg/l                |
|                     | Ammoniacal Nitrogen as N                   | TM099                      | 11/01/2022          | <3,640 mg/l                     | 1560                      | mg/l                |
|                     |                                            |                            | 08/02/2022          | <3,640 mg/l                     | 905                       | mg/l                |
|                     |                                            |                            | 02/03/2022          | <3,640 mg/l                     | 1340                      | mg/l                |
|                     | Chemical oxygen demand (unfiltered)        | TM107                      | 11/01/2022          |                                 | 2720                      | mg/l                |
|                     | Electrical conductivity @20°C (lab)        | TM120                      | 11/01/2022          |                                 | 35300                     | µS/cm               |
|                     | Cadmium (filtered)                         | TM152                      | 11/01/2022          | <0.105 mg/l                     | 0.000776                  | mg/l                |
|                     | Calcium (filtered)                         |                            | 11/01/2022          |                                 | 29.4                      | mg/l                |
|                     | Chromium (filtered)                        |                            | 11/01/2022          |                                 | 0.18                      | mg/l                |
|                     | Copper (filtered)                          |                            | 11/01/2022          |                                 | 0.0399                    | mg/l                |
|                     | Iron (filtered)                            |                            | 11/01/2022          |                                 | 5.27                      | mg/l                |

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|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Cell 1/2 Sump       | Lead (filtered)                            | TM152                      | 11/01/2022          |                                 | 0.0176                    | mg/l                |
|                     | Magnesium (filtered)                       |                            | 11/01/2022          |                                 | 60.3                      | mg/l                |
|                     | Manganese (filtered)                       |                            | 11/01/2022          |                                 | 0.115                     | mg/l                |
|                     | Nickel (filtered)                          |                            | 11/01/2022          |                                 | 0.327                     | mg/l                |
|                     | Potassium (filtered)                       |                            | 11/01/2022          |                                 | 2920                      | mg/l                |
|                     | Sodium (filtered)                          |                            | 11/01/2022          |                                 | 4150                      | mg/l                |
|                     | Zinc (filtered)                            |                            | 11/01/2022          |                                 | 0.155                     | mg/l                |
|                     | 4-Methylphenol                             | TM176                      | 11/01/2022          | <1.6 mg/l                       | <0.02                     | mg/l                |
|                     | Diethyl phthalate                          |                            | 11/01/2022          | <0.44 mg/l                      | <0.02                     | mg/l                |
|                     | Chloride                                   | TM184                      | 11/01/2022          | <19,000 mg/l                    | 12300                     | mg/l                |
|                     |                                            |                            | 08/02/2022          | <19,000 mg/l                    | 11800                     | mg/l                |
|                     |                                            |                            | 02/03/2022          | <19,000 mg/l                    | 12300                     | mg/l                |
|                     | Total Oxidised Nitrogen as N               |                            | 11/01/2022          |                                 | 4.47                      | mg/l                |
|                     | Dichloromethane                            | TM208                      | 11/01/2022          | <0.033 mg/l                     | <0.003                    | mg/l                |
|                     | Sulphate                                   | TM226                      | 11/01/2022          |                                 | 36.7                      | mg/l                |
|                     | Electrical conductivity @20°C (lab)        | TM256                      | 08/02/2022          |                                 | 30600                     | µS/cm               |
|                     |                                            |                            | 02/03/2022          |                                 | 31600                     | µS/cm               |
|                     | Mecoprop                                   | TM411                      | 11/01/2022          | <0.071 mg/l                     | 0.108                     | mg/l                |
| Cell 3/4 Sump       | Base of well/borehole/sump                 | Field                      | 11/01/2022          |                                 | 11.1                      | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 11.1                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 11                        | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 10.76                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 10.78                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 10.67                     | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 2.8m above base                 | 0.34                      | m                   |
|                     |                                            |                            | 08/02/2022          | 2.8m above base                 | 0.32                      | m                   |
|                     |                                            |                            | 02/03/2022          | 2.8m above base                 | 0.33                      | m                   |
|                     | Total organic carbon                       | SUB                        | 11/01/2022          |                                 | 206                       | mg/l                |
|                     | Total Alkalinity as CaCO3                  | TM043                      | 11/01/2022          |                                 | 2700                      | mg/l                |

| Monitoring location | Substance / parameter <sup>(6)</sup> | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|---------------------|--------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Cell 3/4 Sump       | Biological oxygen demand             | TM045                      | 11/01/2022          |                                 | <25                       | mg/l                |
|                     | Ammoniacal Nitrogen as N             | TM099                      | 11/01/2022          | <3,640 mg/l                     | 480                       | mg/l                |
|                     |                                      |                            | 08/02/2022          | <3,640 mg/l                     | 1220                      | mg/l                |
|                     |                                      |                            | 02/03/2022          | <3,640 mg/l                     | 931                       | mg/l                |
|                     | Chemical oxygen demand (unfiltered)  | TM107                      | 11/01/2022          |                                 | 832                       | mg/l                |
|                     | Electrical conductivity @20°C (lab)  | TM120                      | 11/01/2022          |                                 | 7050                      | µS/cm               |
|                     | Cadmium (filtered)                   | TM152                      | 11/01/2022          | <0.105 mg/l                     | 0.000579                  | mg/l                |
|                     | Calcium (filtered)                   |                            | 11/01/2022          |                                 | 187                       | mg/l                |
|                     | Chromium (filtered)                  |                            | 11/01/2022          |                                 | 0.0418                    | mg/l                |
|                     | Copper (filtered)                    |                            | 11/01/2022          |                                 | 0.0709                    | mg/l                |
|                     | Iron (filtered)                      |                            | 11/01/2022          |                                 | 30.6                      | mg/l                |
|                     | Lead (filtered)                      |                            | 11/01/2022          |                                 | 0.00976                   | mg/l                |
|                     | Magnesium (filtered)                 |                            | 11/01/2022          |                                 | 34.7                      | mg/l                |
|                     | Manganese (filtered)                 |                            | 11/01/2022          |                                 | 3.06                      | mg/l                |
|                     | Nickel (filtered)                    |                            | 11/01/2022          |                                 | 0.106                     | mg/l                |
|                     | Potassium (filtered)                 |                            | 11/01/2022          |                                 | 330                       | mg/l                |
|                     | Sodium (filtered)                    |                            | 11/01/2022          |                                 | 564                       | mg/l                |
|                     | Zinc (filtered)                      |                            | 11/01/2022          |                                 | 0.0684                    | mg/l                |
|                     | 4-Methylphenol                       | TM176                      | 11/01/2022          | <1.6 mg/l                       | <0.01                     | mg/l                |
|                     | Diethyl phthalate                    |                            | 11/01/2022          | <0.44 mg/l                      | <0.01                     | mg/l                |
|                     | Chloride                             | TM184                      | 11/01/2022          | <19,000 mg/l                    | 895                       | mg/l                |
|                     |                                      |                            | 08/02/2022          | <19,000 mg/l                    | 5860                      | mg/l                |
|                     |                                      |                            | 02/03/2022          | <19,000 mg/l                    | 4280                      | mg/l                |
|                     | Sulphate                             |                            | 11/01/2022          |                                 | 157                       | mg/l                |
|                     | Total Oxidised Nitrogen as N         |                            | 11/01/2022          |                                 | <0.5                      | mg/l                |
|                     | Dichloromethane                      | TM208                      | 11/01/2022          | <0.033 mg/l                     | <0.003                    | mg/l                |
|                     | Electrical conductivity @20°C (lab)  | TM256                      | 08/02/2022          |                                 | 21600                     | µS/cm               |
|                     |                                      |                            | 02/03/2022          |                                 | 13700                     | µS/cm               |
|                     | Mecoprop                             | TM411                      | 11/01/2022          | <0.071 mg/l                     | 0.0118                    | mg/l                |

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|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Cell 5 Sump         | Base of well/borehole/sump                 | Field                      | 11/01/2022          |                                 | 5.8                       | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 5.8                       | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 5.7                       | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 5.46                      | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 5.49                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 5.3                       | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 2m above base                   | 0.34                      | m                   |
|                     |                                            |                            | 08/02/2022          | 2m above base                   | 0.31                      | m                   |
|                     |                                            |                            | 02/03/2022          | 2m above base                   | 0.4                       | m                   |
|                     | Total organic carbon                       | SUB                        | 11/01/2022          |                                 | 203                       | mg/l                |
|                     | Total Alkalinity as CaCO3                  | TM043                      | 11/01/2022          |                                 | 2710                      | mg/l                |
|                     | Biological oxygen demand                   | TM045                      | 11/01/2022          |                                 | 41.8                      | mg/l                |
|                     | Ammoniacal Nitrogen as N                   | TM099                      | 11/01/2022          | <3,640 mg/l                     | 486                       | mg/l                |
|                     |                                            |                            | 08/02/2022          | <3,640 mg/l                     | 1200                      | mg/l                |
|                     |                                            |                            | 02/03/2022          | <3,640 mg/l                     | 1020                      | mg/l                |
|                     | Chemical oxygen demand (unfiltered)        | TM107                      | 11/01/2022          |                                 | 879                       | mg/l                |
|                     | Electrical conductivity @20°C (lab)        | TM120                      | 11/01/2022          |                                 | 7300                      | µS/cm               |
|                     | Cadmium (filtered)                         | TM152                      | 11/01/2022          | <0.105 mg/l                     | 0.00108                   | mg/l                |
|                     | Calcium (filtered)                         |                            | 11/01/2022          |                                 | 189                       | mg/l                |
|                     | Chromium (filtered)                        |                            | 11/01/2022          |                                 | 0.0449                    | mg/l                |
|                     | Copper (filtered)                          |                            | 11/01/2022          |                                 | 0.13                      | mg/l                |
|                     | Iron (filtered)                            |                            | 11/01/2022          |                                 | 7                         | mg/l                |
|                     | Lead (filtered)                            |                            | 11/01/2022          |                                 | 0.0134                    | mg/l                |
|                     | Magnesium (filtered)                       |                            | 11/01/2022          |                                 | 35.7                      | mg/l                |
|                     | Manganese (filtered)                       |                            | 11/01/2022          |                                 | 2.85                      | mg/l                |
|                     | Nickel (filtered)                          |                            | 11/01/2022          |                                 | 0.11                      | mg/l                |
|                     | Potassium (filtered)                       |                            | 11/01/2022          |                                 | 336                       | mg/l                |
|                     | Sodium (filtered)                          |                            | 11/01/2022          |                                 | 572                       | mg/l                |
|                     | Zinc (filtered)                            |                            | 11/01/2022          |                                 | 0.0632                    | mg/l                |

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|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Cell 5 Sump         | 4-Methylphenol                             | TM176                      | 11/01/2022          | <0.126 mg/l                     | <0.01                     | mg/l                |
|                     | Diethyl phthalate                          |                            | 11/01/2022          | <0.36 mg/l                      | <0.01                     | mg/l                |
|                     | Chloride                                   | TM184                      | 11/01/2022          | <19,000 mg/l                    | 963                       | mg/l                |
|                     |                                            |                            | 08/02/2022          | <19,000 mg/l                    | 6140                      | mg/l                |
|                     |                                            |                            | 02/03/2022          | <19,000 mg/l                    | 4690                      | mg/l                |
|                     | Sulphate                                   |                            | 11/01/2022          |                                 | 160                       | mg/l                |
|                     | Total Oxidised Nitrogen as N               |                            | 11/01/2022          |                                 | <0.5                      | mg/l                |
|                     | Dichloromethane                            | TM208                      | 11/01/2022          | <0.066 mg/l                     | <0.003                    | mg/l                |
|                     | Electrical conductivity @20°C (lab)        | TM256                      | 08/02/2022          |                                 | 21500                     | µS/cm               |
|                     |                                            |                            | 02/03/2022          |                                 | 15200                     | µS/cm               |
|                     | Mecoprop                                   | TM411                      | 11/01/2022          | <0.14 mg/l                      | 0.0109                    | mg/l                |
| Cell 6 Sump         | Base of well/borehole/sump                 | Field                      | 11/01/2022          |                                 | 24.6                      | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 24.6                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 24.6                      | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 24.32                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 24.35                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 24.2                      | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.5m above base                 | 0.28                      | m                   |
|                     |                                            |                            | 08/02/2022          | 1.5m above base                 | 0.25                      | m                   |
|                     |                                            |                            | 02/03/2022          | 1.5m above base                 | 0.4                       | m                   |
|                     | Total organic carbon                       | SUB                        | 11/01/2022          |                                 | 103                       | mg/l                |
|                     | Total Alkalinity as CaCO3                  | TM043                      | 11/01/2022          |                                 | 1510                      | mg/l                |
|                     | Biological oxygen demand                   | TM045                      | 11/01/2022          |                                 | 21.4                      | mg/l                |
|                     | Ammoniacal Nitrogen as N                   | TM099                      | 11/01/2022          | <3,640 mg/l                     | 278                       | mg/l                |
|                     |                                            |                            | 08/02/2022          | <3,640 mg/l                     | 792                       | mg/l                |
|                     |                                            |                            | 02/03/2022          | <3,640 mg/l                     | 157                       | mg/l                |
|                     | Chemical oxygen demand (unfiltered)        | TM107                      | 11/01/2022          |                                 | 404                       | mg/l                |
|                     | Electrical conductivity @20°C (lab)        | TM120                      | 11/01/2022          |                                 | 3720                      | µS/cm               |
|                     | Cadmium (filtered)                         | TM152                      | 11/01/2022          | <0.105 mg/l                     | <0.0008                   | mg/l                |

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|---------------------|--------------------------------------------|-------------------------------------|---------------------|---------------------------------|---------------------------|---------------------|-------|
| Cell 6 Sump         | Calcium (filtered)                         | TM152                               | 11/01/2022          |                                 | 88.5                      | mg/l                |       |
|                     | Chromium (filtered)                        |                                     | 11/01/2022          |                                 | 0.0614                    | mg/l                |       |
|                     | Copper (filtered)                          |                                     | 11/01/2022          |                                 | <0.003                    | mg/l                |       |
|                     | Iron (filtered)                            |                                     | 11/01/2022          |                                 | 1.99                      | mg/l                |       |
|                     | Lead (filtered)                            |                                     | 11/01/2022          |                                 | 0.00232                   | mg/l                |       |
|                     | Magnesium (filtered)                       |                                     | 11/01/2022          |                                 | 20.2                      | mg/l                |       |
|                     | Manganese (filtered)                       |                                     | 11/01/2022          |                                 | 0.552                     | mg/l                |       |
|                     | Nickel (filtered)                          |                                     | 11/01/2022          |                                 | 0.0301                    | mg/l                |       |
|                     | Potassium (filtered)                       |                                     | 11/01/2022          |                                 | 129                       | mg/l                |       |
|                     | Sodium (filtered)                          |                                     | 11/01/2022          |                                 | 277                       | mg/l                |       |
|                     | Zinc (filtered)                            | 11/01/2022                          |                     | 0.0301                          | mg/l                      |                     |       |
|                     | 4-Methylphenol                             | TM176                               | 11/01/2022          | <0.126 mg/l                     | <0.01                     | mg/l                |       |
|                     | Diethyl phthalate                          |                                     | 11/01/2022          | <0.36 mg/l                      | <0.01                     | mg/l                |       |
|                     | Chloride                                   | TM184                               | 11/01/2022          | <19,000 mg/l                    | 347                       | mg/l                |       |
|                     |                                            |                                     | 08/02/2022          | <19,000 mg/l                    | 1090                      | mg/l                |       |
|                     |                                            |                                     | 02/03/2022          | <19,000 mg/l                    | 218                       | mg/l                |       |
|                     |                                            | Sulphate                            |                     | 11/01/2022                      |                           | 34.4                | mg/l  |
|                     |                                            | Total Oxidised Nitrogen as N        |                     | 11/01/2022                      |                           | 1.78                | mg/l  |
|                     |                                            | Dichloromethane                     | TM208               | 11/01/2022                      | <0.066 mg/l               | <0.003              | mg/l  |
|                     |                                            | Electrical conductivity @20°C (lab) | TM256               | 08/02/2022                      |                           | 9170                | µS/cm |
|                     | 02/03/2022                                 |                                     |                     |                                 | 2350                      | µS/cm               |       |
|                     | Mecoprop                                   | TM411                               | 11/01/2022          | <0.14 mg/l                      | <0.004                    | mg/l                |       |
| Cell 7 Sump         | Base of well/borehole/sump                 | Field                               | 11/01/2022          |                                 | 23                        | m                   |       |
|                     |                                            |                                     | 08/02/2022          |                                 | 23                        | m                   |       |
|                     |                                            |                                     | 02/03/2022          |                                 | 23                        | m                   |       |
|                     | Groundwater level/dip                      |                                     | 11/01/2022          |                                 | 22.74                     | m                   |       |
|                     |                                            |                                     | 08/02/2022          |                                 | 22.76                     | m                   |       |
|                     |                                            |                                     | 02/03/2022          |                                 | 22.71                     | m                   |       |
|                     | Leachate level above base of sump/pit base |                                     |                     | 11/01/2022                      | 1.5m above base           | 0.26                | m     |

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|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Cell 7 Sump         | Leachate level above base of sump/pit base | Field                      | 08/02/2022          | 1.5m above base                 | 0.24                      | m                   |
|                     |                                            |                            | 02/03/2022          | 1.5m above base                 | 0.29                      | m                   |
|                     | Total organic carbon                       | SUB                        | 11/01/2022          |                                 | 143                       | mg/l                |
|                     | Total Alkalinity as CaCO3                  | TM043                      | 11/01/2022          |                                 | 2190                      | mg/l                |
|                     | Biological oxygen demand                   | TM045                      | 11/01/2022          |                                 | 29                        | mg/l                |
|                     | Ammoniacal Nitrogen as N                   | TM099                      | 11/01/2022          | <3,640 mg/l                     | 404                       | mg/l                |
|                     |                                            |                            | 08/02/2022          | <3,640 mg/l                     | 867                       | mg/l                |
|                     |                                            |                            | 02/03/2022          | <3,640 mg/l                     | 269                       | mg/l                |
|                     | Chemical oxygen demand (unfiltered)        | TM107                      | 11/01/2022          |                                 | 717                       | mg/l                |
|                     | Electrical conductivity @20°C (lab)        | TM120                      | 11/01/2022          |                                 | 5140                      | µS/cm               |
|                     | Cadmium (filtered)                         | TM152                      | 11/01/2022          | <0.105 mg/l                     | <0.0008                   | mg/l                |
|                     | Calcium (filtered)                         |                            | 11/01/2022          |                                 | 114                       | mg/l                |
|                     | Chromium (filtered)                        |                            | 11/01/2022          |                                 | 0.0936                    | mg/l                |
|                     | Copper (filtered)                          |                            | 11/01/2022          |                                 | 0.00446                   | mg/l                |
|                     | Iron (filtered)                            |                            | 11/01/2022          |                                 | 2.87                      | mg/l                |
|                     | Lead (filtered)                            |                            | 11/01/2022          |                                 | 0.00203                   | mg/l                |
|                     | Magnesium (filtered)                       |                            | 11/01/2022          |                                 | 23.6                      | mg/l                |
|                     | Manganese (filtered)                       |                            | 11/01/2022          |                                 | 0.849                     | mg/l                |
|                     | Nickel (filtered)                          |                            | 11/01/2022          |                                 | 0.0461                    | mg/l                |
|                     | Potassium (filtered)                       |                            | 11/01/2022          |                                 | 197                       | mg/l                |
|                     | Sodium (filtered)                          |                            | 11/01/2022          |                                 | 424                       | mg/l                |
|                     | Zinc (filtered)                            |                            | 11/01/2022          |                                 | 0.0415                    | mg/l                |
|                     | 4-Methylphenol                             | TM176                      | 11/01/2022          | <0.126 mg/l                     | <0.01                     | mg/l                |
|                     | Diethyl phthalate                          |                            | 11/01/2022          | <0.36 mg/l                      | <0.01                     | mg/l                |
|                     | Chloride                                   | TM184                      | 11/01/2022          | <19,000 mg/l                    | 503                       | mg/l                |
|                     |                                            |                            | 08/02/2022          | <19,000 mg/l                    | 1810                      | mg/l                |
|                     |                                            |                            | 02/03/2022          | <19,000 mg/l                    | 484                       | mg/l                |
|                     | Sulphate                                   |                            | 11/01/2022          |                                 | <2                        | mg/l                |
|                     | Total Oxidised Nitrogen as N               |                            | 11/01/2022          |                                 | 1.94                      | mg/l                |

| Monitoring location    | Substance / parameter <sup>(6)</sup> | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|------------------------|--------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Cell 7 Sump            | Dichloromethane                      | TM208                      | 11/01/2022          | <0.066 mg/l                     | <0.003                    | mg/l                |
|                        | Electrical conductivity @20°C (lab)  | TM256                      | 08/02/2022          |                                 | 14000                     | µS/cm               |
|                        |                                      |                            | 02/03/2022          |                                 | 3660                      | µS/cm               |
| Lechate Holding Lagoon | Mecoprop                             | TM411                      | 11/01/2022          | <0.14 mg/l                      | <0.004                    | mg/l                |
|                        | Base of well/borehole/sump           | Field                      | 11/01/2022          |                                 | 8.5                       | m                   |
|                        |                                      |                            | 08/02/2022          |                                 | 8.5                       | m                   |
|                        |                                      |                            | 02/03/2022          |                                 | 8.5                       | m                   |
|                        | Groundwater level/dip                |                            | 11/01/2022          |                                 | 2.5                       | m                   |
|                        |                                      |                            | 08/02/2022          |                                 | 2.6                       | m                   |
|                        |                                      |                            | 02/03/2022          |                                 | 2.1                       | m                   |
|                        | Total organic carbon                 | SUB                        | 11/01/2022          |                                 | 190                       | mg/l                |
|                        | Total Alkalinity as CaCO3            | TM043                      | 11/01/2022          |                                 | 2510                      | mg/l                |
|                        | Biological oxygen demand             | TM045                      | 11/01/2022          |                                 | 42.4                      | mg/l                |
|                        | Ammoniacal Nitrogen as N             | TM099                      | 11/01/2022          | <3,640 mg/l                     | 553                       | mg/l                |
|                        |                                      |                            | 08/02/2022          | <3,640 mg/l                     | 1310                      | mg/l                |
|                        |                                      |                            | 02/03/2022          | <3,640 mg/l                     | 1120                      | mg/l                |
|                        | Chemical oxygen demand (unfiltered)  | TM107                      | 11/01/2022          |                                 | 912                       | mg/l                |
|                        | Electrical conductivity @20°C (lab)  | TM120                      | 11/01/2022          |                                 | 9850                      | µS/cm               |
|                        | Cadmium (filtered)                   | TM152                      | 11/01/2022          |                                 | 0.000116                  | mg/l                |
|                        | Calcium (filtered)                   |                            | 11/01/2022          |                                 | 56                        | mg/l                |
|                        | Chromium (filtered)                  |                            | 11/01/2022          |                                 | 0.0507                    | mg/l                |
|                        | Copper (filtered)                    |                            | 11/01/2022          |                                 | <0.0003                   | mg/l                |
|                        | Iron (filtered)                      |                            | 11/01/2022          |                                 | 6.48                      | mg/l                |
|                        | Lead (filtered)                      |                            | 11/01/2022          |                                 | 0.00548                   | mg/l                |
|                        | Magnesium (filtered)                 |                            | 11/01/2022          |                                 | 42.3                      | mg/l                |
|                        | Manganese (filtered)                 |                            | 11/01/2022          |                                 | 0.457                     | mg/l                |
|                        | Nickel (filtered)                    |                            | 11/01/2022          |                                 | 0.066                     | mg/l                |
|                        | Potassium (filtered)                 |                            | 11/01/2022          |                                 | 620                       | mg/l                |
|                        | Sodium (filtered)                    |                            | 11/01/2022          |                                 | 864                       | mg/l                |



| Monitoring location    | Substance / parameter <sup>(6)</sup>       | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|------------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Lechate Holding Lagoon | Zinc (filtered)                            | TM152                      | 11/01/2022          |                                 | 0.178                     | mg/l                |
|                        | 4-Methylphenol                             | TM176                      | 11/01/2022          |                                 | <0.01                     | mg/l                |
|                        | Diethyl phthalate                          |                            | 11/01/2022          |                                 | <0.01                     | mg/l                |
|                        | Chloride                                   | TM184                      | 11/01/2022          | <19,000 mg/l                    | 2100                      | mg/l                |
|                        |                                            |                            | 08/02/2022          | <19,000 mg/l                    | 1620                      | mg/l                |
|                        |                                            |                            | 10/03/2022          | <19,000 mg/l                    | 4130                      | mg/l                |
|                        | Sulphate                                   |                            | 11/01/2022          |                                 | <2                        | mg/l                |
|                        | Total Oxidised Nitrogen as N               |                            | 11/01/2022          |                                 | 0.162                     | mg/l                |
|                        | Dichloromethane                            | TM208                      | 11/01/2022          |                                 | <0.003                    | mg/l                |
|                        | Electrical conductivity @20°C (lab)        | TM256                      | 08/02/2022          |                                 | 12500                     | µS/cm               |
| LMP5a                  |                                            |                            | 10/03/2022          |                                 | 16600                     | µS/cm               |
|                        | Mecoprop                                   | TM411                      | 11/01/2022          |                                 | 0.00808                   | mg/l                |
|                        | Base of well/borehole/sump                 | Field                      | 11/01/2022          |                                 | 8.5                       | m                   |
|                        |                                            |                            | 08/02/2022          |                                 | 8.5                       | m                   |
|                        |                                            |                            | 02/03/2022          |                                 | 8.5                       | m                   |
|                        | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 8.46                      | m                   |
|                        |                                            |                            | 08/02/2022          |                                 | 8.46                      | m                   |
|                        |                                            |                            | 02/03/2022          |                                 | 8.45                      | m                   |
|                        | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.5m above base                 | 0.04                      | m                   |
|                        |                                            |                            | 08/02/2022          | 1.5m above base                 | 0.04                      | m                   |
| LMP5b                  |                                            |                            | 02/03/2022          | 1.5m above base                 | 0.05                      | m                   |
|                        | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 6.83                      | m                   |
|                        |                                            |                            | 08/02/2022          |                                 | 6.8                       | m                   |
|                        |                                            |                            | 02/03/2022          |                                 | 6.8                       | m                   |
|                        | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 6.8                       | m                   |
|                        |                                            |                            | 08/02/2022          |                                 | 6.78                      | m                   |
|                        |                                            |                            | 02/03/2022          |                                 | DRY                       | m                   |
|                        | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.5m above base                 | 0.03                      | m                   |
|                        |                                            |                            | 08/02/2022          | 1.5m above base                 | 0.02                      | m                   |

| Monitoring location | Substance / parameter <sup>(6)</sup>       | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| LMP5b               | Leachate level above base of sump/pit base | Field                      | 02/03/2022          | 1.5m above base                 | 0                         | m                   |
| LMP6a               | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 10.98                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 10.98                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 10.98                     | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 10.94                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 10.95                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 10.96                     | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.5m above base                 | 0.04                      | m                   |
|                     |                                            |                            | 08/02/2022          | 1.5m above base                 | 0.03                      | m                   |
|                     |                                            |                            | 02/03/2022          | 1.5m above base                 | 0.02                      | m                   |
| LMP7a               | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 10.48                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 10.48                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 10.48                     | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 10.46                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 10.47                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | DRY                       | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.5m above base                 | 0.02                      | m                   |
|                     |                                            |                            | 08/02/2022          | 1.5m above base                 | 0.01                      | m                   |
|                     |                                            |                            | 02/03/2022          | 1.5m above base                 | 0                         | m                   |
| LMP7b               | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 4                         | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 4                         | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 4                         | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | DRY                       | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | DRY                       | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | DRY                       | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.5m above base                 | 0                         | m                   |
|                     |                                            |                            | 08/02/2022          | 1.5m above base                 | 0                         | m                   |
|                     |                                            |                            | 02/03/2022          | 1.5m above base                 | 0                         | m                   |
| M1A                 | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 16.4                      | m                   |

| Monitoring location | Substance / parameter <sup>(6)</sup>       | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| M1A                 | Base of well/borehole/sump                 | Field                      | 08/02/2022          |                                 | 16.4                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 16.4                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 16.26                     | m                   |
|                     | Groundwater level/dip                      |                            | 08/02/2022          |                                 | 16.27                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 16.32                     | m                   |
|                     |                                            |                            | 11/01/2022          | 2m above base                   | 0.14                      | m                   |
|                     | Leachate level above base of sump/pit base |                            | 08/02/2022          | 2m above base                   | 0.13                      | m                   |
|                     |                                            |                            | 02/03/2022          | 2m above base                   | 0.08                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 10.61                     | m                   |
| M1B                 | Base of well/borehole/sump                 |                            | 08/02/2022          |                                 | 10.6                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 10.64                     | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 10.46                     | m                   |
|                     | Groundwater level/dip                      |                            | 08/02/2022          |                                 | 10.3                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 10.53                     | m                   |
|                     |                                            |                            | 11/01/2022          | 2m above base                   | 0.15                      | m                   |
|                     | Leachate level above base of sump/pit base |                            | 08/02/2022          | 2m above base                   | 0.3                       | m                   |
|                     |                                            |                            | 02/03/2022          | 2m above base                   | 0.11                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 21                        | m                   |
| M2A                 | Base of well/borehole/sump                 |                            | 08/02/2022          |                                 | 20.85                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 20.8                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 20.61                     | m                   |
|                     | Groundwater level/dip                      |                            | 08/02/2022          |                                 | 20.58                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 20.62                     | m                   |
|                     |                                            |                            | 11/01/2022          | 2m above base                   | 0.39                      | m                   |
|                     | Leachate level above base of sump/pit base |                            | 08/02/2022          | 2m above base                   | 0.27                      | m                   |
|                     |                                            |                            | 02/03/2022          | 2m above base                   | 0.18                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 19.8                      | m                   |
| M2B                 | Base of well/borehole/sump                 |                            | 08/02/2022          |                                 | 19.8                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 19.8                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 19.8                      | m                   |

| Monitoring location | Substance / parameter <sup>(6)</sup>       | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| M2B                 | Groundwater level/dip                      | Field                      | 11/01/2022          |                                 | 19.58                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 19.6                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 19.51                     | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 2m above base                   | 0.22                      | m                   |
|                     |                                            |                            | 08/02/2022          | 2m above base                   | 0.2                       | m                   |
|                     |                                            |                            | 02/03/2022          | 2m above base                   | 0.29                      | m                   |
| M3A                 | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 21.5                      | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 21.5                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 21.5                      | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 21.3                      | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 21.3                      | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 21.42                     | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.8m above base                 | 0.2                       | m                   |
|                     |                                            |                            | 08/02/2022          | 1.8m above base                 | 0.2                       | m                   |
|                     |                                            |                            | 02/03/2022          | 1.8m above base                 | 0.08                      | m                   |
| M3B                 | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 15.53                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 15.53                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 15.6                      | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 15.32                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 15.32                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 15.52                     | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.8m above base                 | 0.21                      | m                   |
|                     |                                            |                            | 08/02/2022          | 1.8m above base                 | 0.21                      | m                   |
|                     |                                            |                            | 02/03/2022          | 1.8m above base                 | 0.08                      | m                   |
| M4A                 | Base of well/borehole/sump                 |                            | 11/01/2022          |                                 | 18.61                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 18.61                     | m                   |
|                     |                                            |                            | 02/03/2022          |                                 | 18.61                     | m                   |
|                     | Groundwater level/dip                      |                            | 11/01/2022          |                                 | 18.42                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 18.44                     | m                   |

| Monitoring location | Substance / parameter <sup>(6)</sup>       | Test method <sup>(2)</sup> | Date <sup>(3)</sup> | Compliance limit <sup>(7)</sup> | Result <sup>(1) (4)</sup> | Unit <sup>(5)</sup> |
|---------------------|--------------------------------------------|----------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| M4A                 | Groundwater level/dip                      | Field                      | 02/03/2022          |                                 | 18.5                      | m                   |
|                     | Leachate level above base of sump/pit base |                            | 11/01/2022          | 1.8m above base                 | 0.19                      | m                   |
|                     |                                            |                            | 08/02/2022          | 1.8m above base                 | 0.17                      | m                   |
| M4B                 | Base of well/borehole/sump                 |                            | 02/03/2022          | 1.8m above base                 | 0.11                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 17                        | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 17                        | m                   |
|                     | Groundwater level/dip                      |                            | 02/03/2022          |                                 | 16.9                      | m                   |
|                     |                                            |                            | 11/01/2022          |                                 | 16.81                     | m                   |
|                     |                                            |                            | 08/02/2022          |                                 | 16.85                     | m                   |
|                     | Leachate level above base of sump/pit base |                            | 02/03/2022          |                                 | DRY                       | m                   |
|                     |                                            |                            | 11/01/2022          | 1.8m above base                 | 0.19                      | m                   |
|                     |                                            |                            | 08/02/2022          | 1.8m above base                 | 0.15                      | m                   |
|                     |                                            |                            | 02/03/2022          | 1.8m above base                 | 0                         | m                   |

(1) The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

(2) Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.

(3) For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

(4) The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated; refer to laboratory data sheets for specific uncertainty.

(5) Depths reported as metres (m) are metres below ground level unless are labelled as leachate head above base of sump.

(6) For details of the sampling method, frequency and parameters measured / analysed for, refer to the site Environmental Monitoring Management Plan (EMMP).

(7) Where blank, there is no defined compliance limit specified for the monitoring location / parameter.

Signature:.....

Date: 21 March 2022

(Authorised to sign as representative of  
Operator)